

MINIMUM SEARCH SPACE AND EFFICIENT METHODS FOR STRUCTURAL CLUSTER OPTIMIZATION

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Minimum search space and efficient methods for structural cluster optimization

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Abstract

A novel unification for the problem of the search of optimal clusters under a well pair potential function is presented. My formulation introduces appropriate sets and lattices from where efficient methods can address this problem. First, as results of my propositions a discrete set is depicted such that the solution of a continuous and discrete searching of an optimal cluster is the same. Then, this discrete set is approximated by a special lattice IF. IF stands for a lattice that combines lattices IC and FC together. In fact, two lattices IF with 9483 and 1739 particles are obtained with the property that they include all putative optimal clusters from 2 through 1000 particles, even the difficult optimal Lennard-Jones clusters, C_{38}^* , C_{98}^* , and the Ino's decahedrons. C_{98}^* is the only cluster where its initial configuration has a different geometry than the putative optimal cluster in term of the adjacency matrix stated by Hoare. My paper is not a benchmark, I develop a theory and a numerical experiment for the state of the art of the optimal Lennard-Jones clusters and even I found new optimal Lennard-Jones clusters with a greedy search method called Modified Peeling Method. The paper includes all the necessary data to allow the researchers reproduce the state of the art of the optimal Lennard-Jones clusters at April 8, 2005. This novel formulation unifies the geometrical motifs of the optimal Lennard-Jones clusters and gives new insight towards the understanding of the complexity of the NP problems.

Keywords: 02.60.Pn Numerical optimization, 21.60.Gx Cluster models, 31.15.Qg Molecular dynamics and other numerical methods, 36.40.Qv Stability and fragmentation of clusters

1 Introduction

Many methods have been proposed for the problem of the search of optimal clusters (SOC) [2, 4, 3, 5, 6, 7, 8, 10, 9, 13, 15, 16, 17, 18, 19, 20, 21, 24, 25, 28, 30, 31]. It takes a while until a novel method is able to validity its performance and found new putative optimal Lennard-Jones (LJ) clusters. Nowadays, Shao *et al.* are pushing the frontier of the size of the putative optimal LJ clusters over 309 particles [4, 3, 12, 30, 21, 22, 23]. The author has kept contact with this group for collaboration. Huang *et al.* [11] give equivalent formulations for LJ Potential. Xue [32] present several properties of the LJ Potential formulation $\frac{1}{x^{12}} - \frac{2}{r^6}$, here the minimum LJ potential for two particles is at distance $r^* = 1$. Pardalos *et al.* [18] describe the conditions of a well pair potential function and present several optimization methods for the SOC.

Maranas and Floudas [16] present a method of global optimization for molecules:

"Given the connectivity of the atoms in a molecule and the force field according to which they interact, find the molecular conformation(s) in the three-dimensional Euclidian space involving the global minimum potential energy".

This method uses the connectivity of atoms in a molecule to partitioning in several sets based on the distance of pairs of atoms. Several properties are presented and a global optimization algorithm is presented. The complexity of this algorithm is exponential over the number of variables.

Some Authors resist adding to much knowledge and heuristics for the design of an algorithm or method for SOC. However, successful methods based on the molecular dynamics, molecular chemistry or physics [9, 27, 14, 31, 17, 15, 25, 7, 8, 30] reduce the Hoare complexity $\exp(-2.5176 + 0.3572n + 0.028n^2)$ [9] to a polynomial time $(0.05 \pm 0.02)n^{2.8 \pm 0.1}$ [8], $0.02n^{2.9}$ [4], and other polynomial times bigger than the previous ones (some can be found in [27]). However even with the help of previous knowledge, the complexity of a discrete SOC is the same of the NP class of problems, and this is the challenging impulse for the creation of novel methods. Here, I do not included an extent review of methods for SOC but some reviews are [27, 13, 18]. In addition, for the limitation of time and space is not possible to review or mention all previous methods or classify them, instead the article focus in the closed related methods under my perspective. My apologies, if I omit a relevant method but if this happens, it is without prejudice.

It is probable that methods with a good background on the knowledge of the problem and using adaptive search, simulated annealing, lattices, basin hopping, funnels, phenotypes, fusion, evolutionary, and genetic operations have advantages over other methods because they are exploring the discrete search spaces of my lattice IF (hereafter only IF, see Figs. 2, and 3). It was stated by Northby [17]:

”The complexity of the problem lies in the fact that while it is always possible with a computer to allow a particular initial configuration to relax to the adjacent minimum of the potential energy surface, unless the starting configuration has been chosen to lie in the proper valley, or ”catchment basin, the resulting configuration will not correspond to the absolute minimum.”

Considering this remark, the mentioned methods can relax efficiently but the global minimum could escape from the initial selection in a particular lattice, making necessary the exhaustive creation of good initial clusters from different lattices or the transformation in good ones before the relaxation. Some successful methods use random selection of clusters and particles in a random way from the well know lattices type IC, FC, ID, TO and so on. Here, my propositions close the gap stated by Northby between the initial configuration and the global minimum cluster, in the sense that exist a lattice as an appropriate search space from where it is possible to repeat all the putative optimal LJ clusters reported in The Cambridge Cluster Database (CCD) [26]. As an example, of such lattice, two lattices are presented, IF9483 and MIF1739, such that they contain particular clusters that match with the putative optimal LJ clusters from $n = 2, \dots, 100$ in one relaxation (minimization procedure). The complexity of this type of telephone directory method on IF is at most $O(n^3)$ (the complexity of the relaxation multiplying by the complexity of the evaluation of a pair potential function for n particles). However, this is not a lower bound for the complexity of discrete methods of SOC using IF, also there are cases where it is possible to reduce the numbers of operations in the evaluation of the potential of a cluster by the symmetry inherited from IF. C_{13}^* is an example where the cost of computing the potential is 4 instead of 91 operations (section 4.1 present C_{13}^* has the example of this). IF allows to have automatic classification of clusters, a measurement in term of the number of adjustment for solving SOC in discrete fashion, and let to study NP complexity.

IF as a discrete search space coincides with the well know result from Quantum Mechanic that the particles interact in discrete fashion. Moreover, the existence of particles forming an IF can be seeing as particles in a hot temperature where the positions IC and FC could be occupied with equal likelihood. What it makes difficult to predict the geometric shape of small clusters is the mobility of the potential energy surface (PES). PES changes from small cluster to larger ones in the sense that the particles’ displacements from the lattice position have more free in the small clusters than in large ones, in order to reduce the total cluster energy. In large cluster the transition to stable structures correspond to a change of geometrical structure from IC to a decahedral lattice [13, 23] where the PES has less freedom. Section 6 has Figures where the normalized gradient is depicted. From these figures the PES’s mobility for the particles in the outer shells of a small cluster can be explained.

The notation and some conventions used in this report are given in Section 2. Section 3 describes the properties of the potential where this methodology can be applied. Sections 4 and 5 describe the special IF9483, MIF1739 and methods for them. Section 6 presents the results from the minimum MIF1739 that contains the all the putative optimal LJ clusters, tables 28-60 give in an efficient and short notation all the indices to build the initial clusters, tables 18-27 present the geometrical type, the initial and minimum LJ potential, and a measure of the adjustment necessary to transform from C_{n+1} to C_n , and tables 2-17 give the coordinates of MIF1739 in order to reproduce the numerical results presented here. In addition, this section includes novel figures of the difficult clusters inside

of IF9483, and novel descriptions of some clusters. Finally, Section 7 presents my conclusions and future work.

2 Notation

A lattice, $\Omega = \{p_i\}_{i \in I}$, $p_i \in \mathbb{R}^3 \forall i \in I$ where I is a set of indexes ($I = \mathbb{R}$ or $I = \mathbb{N}$) is a set of points in a regular pattern in \mathbb{R}^3 .

A cluster of size n is $C_n = \{p_{i_1}, p_{i_2}, \dots, p_{i_n}\}$, $p_{i_j} \in \Omega$, $\forall j = 1, \dots, n$.

$\vec{\cdot} : L \rightarrow \mathbb{R}^3$ means $\vec{\cdot}(C_n) = \vec{C}_n = (p_{i_1}, p_{i_2}, \dots, p_{i_n}) \in \mathbb{R}^{3N}$, it is a vector representation of a cluster where $p_{i_l} = (x_{i_l}, y_{i_l}, z_{i_l})$ is mapped into cylindrical coordinates $(\rho_{i_l}, \alpha_{i_l}, \beta_{i_l})$, $\rho_{i_l} \in \mathbb{R}^+$, $\alpha_{i_l} \in [0, \pi]$ is zero on the semi-axes Y^+ and the $\theta_{i_l} \in [0, 2\pi]$. Then coordinates $p_{i_l} \leq p_{i_m}$, $l \leq m$ if $\rho_{i_l} \leq \rho_{i_m}$; or if $\rho_{i_l} = \rho_{i_m}$ and $\alpha_{i_l} \leq \alpha_{i_m}$; or if $\rho_{i_l} = \rho_{i_m}$, $\alpha_{i_l} = \alpha_{i_m}$, and $\beta_{i_l} \leq \beta_{i_m}$.

\vec{C}_n is used as an element of the metric space \mathbb{R}^{3n} .

Let $p_j, p_k \in \mathbb{R}^3$ and $r_{j,k} = \sqrt{(x_j - x_k)^2 + (y_j - y_k)^2 + (z_j - z_k)^2}$. Some potential functions [16] are Buckingham Potential (BU):

$$\text{VBU}_{i,j} = \alpha_{i,j} e^{\beta_{i,j} r_{i,j}} + \frac{\gamma_{i,j}}{r_{i,j}^6}$$

where $\alpha_{i,j}$, $\beta_{i,j}$, and $\gamma_{i,j}$ are parameters for the type of particles.

Kihara Potential (KI):

$$\text{VKI}_{i,j} = 4\epsilon_0 \left[\left(\frac{1 - \gamma}{r_{i,j}/\sigma - \gamma} \right)^{12} + \left(\frac{1 - \gamma}{r_{i,j}/\sigma - \gamma} \right)^6 \right]$$

where ϵ_0 , σ , and γ are parameters for the type of particles.

Lennard-Jones potential (LJ):

$$\text{VLJ}_{i,j} = V_{i,j} = 4\epsilon_0 \left[\left(\frac{\sigma_{i,j}}{r_{i,j}} \right)^{12} - \left(\frac{\sigma_{i,j}}{r_{i,j}} \right)^6 \right]$$

where ϵ_0 and $\sigma_{i,j}$ are parameters for the type of particles. For the examples in this paper, $\epsilon_0 = \sigma_{i,j} = 1$.

Morse Potential (MO) [9] is

$$\text{VMO}_{i,j} = \left(1 - e^{-\alpha(1-r_{i,j})} \right)^2 - 1$$

where α is a parameter.

A pair potential can be represented by

$$\text{VXX}_{j,k} = \text{EXX}(\{p_j, p_k\}) = \text{EXX}(p_j, p_k) = \text{EXX}(r_{j,k})$$

where XX can be BU for Buckingham, KI for Kihara, LJ for Lennard-Jones, and MO for Morse Potentials.

The complete potential of a cluster is

$$\text{EXX}(C_n) = \sum_{i=1}^{n-1} \sum_{j=i+1}^n \text{VXX}_{j,k}$$

The Lennard-Jones Potential (LJ) is written also as

$$E(C_n) = E(\vec{C}_n) = 4 \sum_{i=1}^{n-1} \sum_{j=i+1}^n \left(\frac{1}{r_{jk}^{12}} - \frac{1}{r_{jk}^6} \right)$$

when there is not confusion with the other potentials.

The conventions follows in the paper for the problems are:

SOC denotes the problem of searching optimal clusters.

SOCC denotes SOC solved in a continuous search space.

S OCD denotes SOC solved in a discrete search space. Here it is assumed that an appropriate discrete set or lattice of points in \mathbb{R}^3 exists.

SOC(n) denotes SOC for clusters of size n .

SOCC(n) denotes SOCC for clusters of size n .

S OCD(n) denotes S OCD for clusters of size n .

SOCYXX denotes one of the previous problems, where Y=C or Y=D, and XX is BU, KI, LJ, and MO Potentials.

SOCYXX(n) denotes one of the previous problems for clusters of size n .

For $n \in \mathbb{N}$, $n \geq 2$ SOCCXX(n) can be stated:

Given $A \subset \mathbb{R}^3$, look for $\vec{C}_n^* = (x_1, \dots, x_n) \in \mathcal{A}^n$ such that $\text{EXX}(\vec{C}_n^*) \leq \text{EXX}(x), \forall x \in A^n$ where $A^n = A \times \dots \times A$ (n times).

In similar way SOCDXX(n) can be stated:

Given a lattice $\Omega = \{p_i \mid p_i \in \mathbb{R}^3, i = 1, \dots, N, N \gg n, N \in \mathbb{N}\}$, find $\vec{C}_n^* = (p_{l_1}, \dots, p_{l_n})$, such that $\text{EXX}(\vec{C}_n^*) \leq \text{EXX}(\vec{C}_{I^k})$, $\forall I^k \subset \mathbb{N}, |I^k| = n$ where $|\cdot|$ is the number of elements of a set. This means that the global optimal potential of the cluster of size n , $\text{EXX}(\vec{C}_n^*)$ is less or equal than the potential of any other cluster of n points from Ω .

The function adj is defined as $\text{Adj}: 2^\Omega \times 2^\Omega \rightarrow \mathbb{N}$, $\text{Adj}(C_n, C_m) = |(C_n \setminus C_m) \cup (C_m \setminus C_n)|$.

The function On is defined as $\text{On}: 2^\Omega \times 2^\Omega \rightarrow \mathbb{N}$, $\text{On}(C_n, C_m) = |C_m \setminus C_n|$.

The function Off is defined as $\text{Off}: 2^\Omega \times 2^\Omega \rightarrow \mathbb{N}$, $\text{Off}(C_n, C_m) = |C_n \setminus C_m|$.

It is easy to see that $\text{Adj}(C_n, C_m) = \text{On}(C_n, C_m) + \text{Off}(C_n, C_m)$.

There are several references that explains how to build IC and FC [15, 30, 24], in particular Northby [17] called to the combination of both IF. Hereafter, IC n represent a subset of n points of type IC, and similarly for FC and IF.

$C_j \rightarrow C_j^*$ means $C_j^* = \min(C_j)$, where \min is a minimization procedure. The results reported here were computed with a version the Conjugated Gradient Method (CGM). Also, in the text when there is not confusion C_j^* means the putative optimal LJ cluster.

In some figures the normalized gradient of LJ is depicted. This vector correspond to $\nabla \text{VXX}(x^*) / \|\nabla \text{VXX}(x^*)\|$. The corresponding component of the gradient is drawn as a vector in \mathbb{R}^3 on each particle of a given cluster.

3 Properties of the LJ Potential

Note that LJ, BU, and KI but MO Potentials share the following properties:

1. $\lim_{r \rightarrow r_0} \text{VXX}(r) = \infty$
2. Each cluster under a pair potential has a basin.

As a detailed example, I take $E(\cdot) = \text{VLJ}(\cdot)$ in one dimension. Given two particles, the first is fixed on $(0, 0, 0)$, and the second with coordinates $(r, 0, 0)$ is free to move on axes X. The following properties are satisfied for E (similar results are given by Xue [32]):

1. $E(r) = 4\left(\frac{1}{r^{12}} - \frac{1}{r^6}\right)$.
2. $E'(r) = 24\frac{-2+r^6}{r^{13}}$
3. $E''(r) = -24\frac{-26+7r^6}{r^{14}}$
4. $E(r) < 0, r > 1, \lim_{r \rightarrow \infty} E(r) = 0$.
5. $r^* = \sqrt[6]{2}$, is the global minimum of E. $E(r^*) = -1.0, E'(r^*) = 0, E''(r^*) > 0$

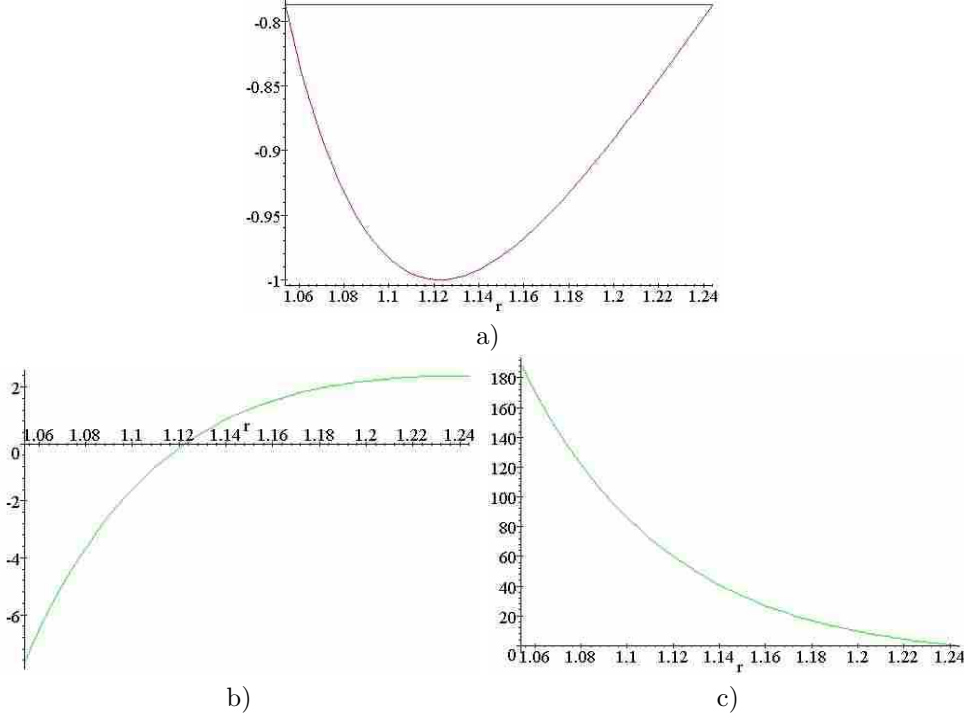


Figure 1: a) $E(r)$, b) $E'(r)$, and c) $E''(r)$.

6. $E(r^* + \xi) \approx -1 + O(\xi^2)$, $0 \leq |\xi| \ll 1$. By a series expansion $E(r^* + \xi) = 4 \left(\frac{1}{(\sqrt[6]{2+\xi})^{12}} - \frac{1}{(\sqrt[6]{2+\xi})^6} \right) = -1 + \left(18 (\sqrt[3]{2})^2 \right) \xi^2 + O(\xi^3)$, with $0 \leq |\xi| \ll 1$, $E(\sqrt[6]{2+\xi}) \approx -1 + K\xi^2$, $K = 18 (\sqrt[3]{2})^2$.
7. The basin region of E is the interval $(1.0536668, 1.2444551)$. $E''(r) > 0$, $\forall r \in (1.0536668, 1.2444551)$. Therefore $E(r)$ is convex and $E(r) < -0.78698215$, $\forall r \in (1.0536668, 1.2444551)$.

Figure 1 depicts $E(r)$, $E'(r)$, and $E''(r)$ in $(1.0536668, 1.2444551)$.

4 Unified Lattice

This section explains what is the relationship between the discrete and continuous SOC. The main proposition is: Exist a discrete set for all optimal clusters where their potential has the same value as in the solution of the continuous searching of optimal clusters. This type of potential function must fulfill the conditions of a well potential [18]:

1. Potential function creates a infinite repulsion force when distance between two particles goes to 0.
2. Each cluster under this potential has a basin.

Note that BU and LJ functions comply 1. KI function and MO function do not comply with 1.

Proposition 1. Exist a discrete set, Ω , where $\forall j \in N$, $j \geq 2$, the potential of $\text{SOCDX}(j)$ has the same optimal value of $\text{SOCCX}(j)$ for a potential function such that

1. $\lim_{r_{i,j} \rightarrow 0} VXX(r_{i,j}) = \infty$.
2. $\nabla^2 VXX(x^*)$ semi-positive, $\|\nabla VXX(x^*)\| \ll 1$ and $\frac{\|\nabla VXX(x^*)\|}{|VXX(x^*)|} < \delta_0$, where $0 < \delta_0 \ll 1$

where XX is BU or LJ.

Proof. Without lost of generality let us assume a continuous searching for a cluster of size j in $A = \{p = (x, y, z) \in \mathbb{R}^3 \mid \|p\| \leq r\}$, a ball of ratio, $r \gg 0$ from where $\vec{\cdot} : A \rightarrow \mathbb{R}^{3j}$. The continuous searching can be stated as generate k random vectors $\{\vec{C}_j^l\}_{l=1, \dots, k}$ with coordinates in A and using a minimization routine to compute $\vec{C}_j^{\textcircled{R}l} = (x_{l1}, x_{l2}, \dots, x_{lN})$ such that the property 2 is fulfill. Then select $x^* = \vec{C}_j^* = \min_{l=1, \dots, k} \{\vec{C}_j^{\textcircled{R}l}\} = (x_1^*, \dots, x_j^*)$. Repeating this procedure, A is exhaustively explored, therefore this must provide a solution of SOCCXX(j). This means, $\text{EXX}(x^*) \leq \text{EXX}(x), \forall x = (p_1, \dots, p_j) \in \mathbb{R}^{3N}, p_l \in A, l = 1, \dots, j$.

The first property does not allow to have $p_m = p_n$ with $m \neq n$. Therefore, $p_i, i = 1, \dots, j$ are separate points in $A \subset \mathbb{R}^3$. Moreover, we can translate and set $x_1 = (0, 0, 0)$ without changing the value of EXX. Therefore $\exists \varepsilon_0 > 0$ for solving SOCCXX(j) and there is not need of the points, $p \in \mathbb{R}^3$ such that $\|p\| < \varepsilon_0$ because they are never going to participate by the condition 1.

For other coordinates of x^* , the second property provides a basin or convexity region around it. A Taylor series for a potential function around of $x^* \in \mathbb{R}^{3j}$ for a direction $d \in \mathbb{R}^{3j}$ with $0 < \varepsilon \ll 1$ is

$$\text{VXX}(x^* + \varepsilon d) = \text{VXX}(x^*) + \varepsilon d \cdot \nabla \text{VXX}(x^*) + \frac{1}{2} \varepsilon^2 d \cdot \nabla^2 \text{VXX}(x^*) \cdot d + O(\varepsilon^3).$$

By the convexity, $\frac{1}{2} \varepsilon^2 d \cdot \nabla^2 V(x^*) \cdot d \geq 0$. Therefore

$$|\text{VXX}(x^* + \varepsilon d) - \text{VXX}(x^*)| \leq |\varepsilon| \|d\| \|\nabla \text{VXX}(x^*)\|,$$

$$\frac{|\text{VXX}(x^* + \varepsilon d) - \text{VXX}(x^*)|}{|\text{VXX}(x^*)|} \leq |\varepsilon \delta_0|.$$

This property allows to select a truncated representation of x^* for some $\varepsilon_1 = \varepsilon \delta_0 > 0$. Therefore, $x = (p_1, \dots, p_j) \in \mathbb{R}^{3j}$ such that $\|x - x^*\| < \varepsilon_1$ and $\|p_l - p_l^*\| < \varepsilon_0, l = 1, \dots, j$ are not necessary to consider because they are never going to improve the minimal potential of SOCCXX(j). Let $\varepsilon_j = \min\{\varepsilon_0, \varepsilon_1\}$.

Finally, $\Omega^o = \cup_{j=2}^{\infty} C_j^*$ for $\varepsilon^* = \min\{\varepsilon_j\}_{j=2}^{\infty}$ and by the construction of Ω^o it follows immediately that SOCDXX(j) and SOCCXX(j) have the same solution $\forall j \in \mathbb{N}, j \geq 2$. ■

Remark 1. In the previous proposition, A is a subset of \mathbb{R} . A has the cardinality of \mathbb{R} but the proposition states that a discrete set of points of A is sufficient in order to have the same solution between SOCDXX(j) and SOCCXX(j) where XX is BU or LJ.

Proposition 2. The set $\Omega^l = \{p \in C_j^k \mid \text{local clusters}, C_j^k, |I^k| = j\}$ under a well potential function (a potential that fulfill the properties of the Proposition 1) is numerable.

Proof. Let assume that the $\cup_{j=1, \dots, N, |I^k|=j} C_j^k$, is not numerable. This means $\exists K_j = \cup_{|I^k|=j} I^k$ is not numerable. From the previous proposition, clusters can be created from the continuous searching depicted above, therefore each one fulfill properties 1) and 2) and we add the coordinates of each C_j founded to some Ω . Then for $j, \exists \varepsilon_j$ such that $\vec{C}_j^m, \vec{C}_j^n \in \mathbb{R}^{3j}$ and $\vec{C}_j^m \neq \vec{C}_j^n$ for $\forall m \neq n, m, n \in K_j$. But each \vec{C}_j^m can be approximated $\underline{\vec{C}}_j^m \in Q^{3j}$ if $\|\underline{\vec{C}}_j^m - \vec{C}_j^m\| < \varepsilon_j \forall m \in K_j$, which imply that $\cup_{m \in K_j} \underline{\vec{C}}_j^m \subset Q^3$ is not numerable! ■

Proposition 3. The set $\Omega^o = \{p \in C_j^* \mid \text{putative global clusters}, C_j^*, j \in \mathbb{N}\}$ is numerable.

Proof. Ω^o is the union of finite set of points, therefore is numerable. ■

Proposition 4. The set $\Omega^b = \{p \in C_j^{k'} \mid C_j^{k'} \text{ is a cluster within the basin of the optimal local cluster } C_j^k, |I^k| = j\}$ is not numerable.

Proof. Given an optimal local cluster C_j^k by the condition 2 of Proposition 1, $\exists \delta_0 > 0$ and $d \in \mathbb{R}^{3j}$ such that $\forall 0 \leq \delta \leq \delta_0, \vec{C}_j^{k\delta} = \vec{C}_j^k + \delta d$, then $\vec{C}_j^{k\delta} \rightarrow C_j^k, \forall 0 \leq \delta \leq \delta_0$. Therefore, Ω^b is union of non-numerable sets for each optimal local cluster. ■

Proposition 5. Exist a lattice, Ω^* such that $\exists C_k' \in \Omega^*, C_k' \rightarrow C_k^* \in \Omega^o \forall k \geq 2$.

Proof. The results follows from the simple and trivial lattice Q^3 and $\Omega^b \cap Q^3 \neq \emptyset$. ■

Remark 2. The last proposition states that $\Omega^* = \Omega^b \cap Q^3$ is one trivial lattice where $\exists C_j$, such that $C_j \rightarrow C_j^*$, $\forall j \geq 2$. In order to find IF each putative optimal LJ cluster, C_j^* , $j=2, \dots, 1000$ was added in a discrete and smoothing way. Surprising, using C_{13}^* as a seed, which is an icosahedron, the IF structure show up naturally.

The next proposition states that is not possible to find a function from \mathbb{N} to Ω capable to give all optimal clusters. Hereafter, Ω is a numerable set and could be the set Ω^l or the lattice Ω^* .

Proposition 6. $\exists s : \mathbb{N} \rightarrow \Omega$, $s(j) = C_j = \{x_{i_1}, \dots, x_{i_j}\}$, $x_{i_k} \in \Omega \forall k = 1, \dots, j$ such that $s(j) = C_j^*$, $\forall j \in \mathbb{N}$.

Proof. The proof is based in building a Cantor's Diagonal schema. Suppose that such selection function, s , exists for some order in Ω , which is numerable. Then changing the first particle in Ω that belong to the C_2^* for any other different and far way from this one, the new order Ω_2 is an order where s can not give C_2^* . This procedure is repeated for C_k^* , $k = 3, \dots, \infty$, Ω_k , $k = 3, \dots, \infty$ where s can not give C_k^* . The set of points that belong to the diagonal differs from all the enumerations Ω_k , $k = 2, \dots, \infty$ which are all the possible enumerations of Ω ! ■

Proposition 7. It is not possible to find an algorithm with polynomial complexity to solve the problem of searching optimal clusters.

Proof. If such algorithm exist, it means that it is possible to find $M \in \mathbb{N}$, $M > 0$, $T(j) \leq O(j^M) \forall j \in \mathbb{N}$ where T is the time to take this algorithm to find C_j^* . But this means that such algorithm is the function s of the previous proposition! ■

Remark 3. The last proposition states that it is not possible to build a selection function in computational time for finding all the optimal clusters from $j \geq 2$, $j \in \mathbb{N}$. In particular, it states that the complexity of finding all the optimal clusters from $j = 2, \dots, \infty$ cannot be derived from some arbitrary inhered order of Ω (numerable).

One of the reason of the success of the methods for SOCCXX(j) and SOCDXX(j) is the combination of different lattices, which are subsets of Ω^* . Moreover, from the cardinality point of view, Ω^* is the smaller set than \mathbb{R}^3 , and it is the search space to explore the complexity of the NP problem SOCDXX(j), $\forall j \geq 2$.

The Proposition 1 permits to build a discrete set of points after the solution of the SOCDXX(j), $\forall j \geq 2$ but Proposition 2 proof that exist a dense set where SOCC and SOCD have the same solution, therefore the continuous searching of optimal clusters is not efficient way for searching and compute optimal clusters.

It was not easy to build a set of points as a discrete lattice from basin regions for solving SOCDLJ(j), $\forall j \geq 2$ for the known optimal cluster, i.e., a set of points in \mathbb{R}^3 with a regular structure of a lattice. However, combining IC and FC in an appropriate way was the surprising answer. Section 6 presents numerical experiment of the propositions of this section. Particularly, for SOCDLJ(j) two lattices, IF9483 and MIF1739, are presented with the property, $\exists C_j \rightarrow C_j^*$, $j = 2, \dots, 1000$ in the sense that ELJ(C_j^*) are the putative optimal potential LJ values from [26] or better ones.

4.1 Symmetry reduces the Complexity of Potential's Evaluation

For SOC, the symmetry inhered from a lattice Ω^* can give impressive reductions in the number of operations to evaluate a potential function. A simple example, taking $\Omega^* = \text{IF}$ and C_{13} as a centered icosahedron. Note that C_{13} is in a ball of ratio, $r^* = \sqrt[3]{2}$. Here, without lost of generality the points of $C_{13} = \{p_1, \dots, p_{13}\}$ are:

$$\begin{aligned}
p_1 &= (0.000000000000, 0.000000000000, 0.000000000000), \\
p_2 &= (0.000000000000, 1.081838288553, 0.000000000000), \\
p_3 &= (0.967625581547, 0.483812790773, 0.000000000000), \\
p_4 &= (0.299012748890, 0.483812790773, -0.920266614664), \\
p_5 &= (-0.782825539663, 0.483812790773, -0.568756046574), \\
p_6 &= (5 \cdot -0.782825539663, 0.483812790773, 0.568756046574), \\
p_7 &= (0.299012748890, 0.483812790773, 0.920266614664), \\
p_8 &= (0.782825539663, -0.483812790773, -0.568756046574), \\
p_9 &= (-0.299012748890, -0.483812790773, -0.920266614664), \\
p_{10} &= (-0.967625581547, -0.483812790773, 0.000000000000), \\
p_{11} &= (-0.299012748890, -0.483812790773, 0.920266614664), \\
p_{12} &= (0.782825539663, -0.483812790773, 0.568756046574), \text{ and} \\
p_{13} &= (0.000000000000, -1.081838288553, 0.000000000000).
\end{aligned}$$

Then by the symmetry over these points, $\text{EXX}(C_{13}) = 12\text{VXX}_{1,2} + 30\text{VXX}_{2,3} + 30\text{VXX}_{2,8} + 6\text{VXX}_{2,13}$

which requires five points $\{p_1, p_2, p_3, p_8, p_{13}\}$ and the four factors $VXX_{1,2}, VXX_{2,3}, VXX_{2,8},$ and $VXX_{2,13}$ for any potential function. But without symmetry, $EXX(C_{13}) = \sum_{i=0}^{n-1} \sum_{j=i+1}^{13} VXX_{i,j}$ needs thirteen points and $13(13+1)/2 = 91$ factors $VXX_{i,j}$. In particular for this cluster $ELJ(C_{13}) = -44.326801 = ELJ(C_{13}^*)$.

5 Methods for IF

There are several references that explains how to build IC and FC [13, 15, 24, 30].

In gross terms, I build an IF for the Lennard-Jones Potential using the propositions of the previous section. The first approach was to build a lattice from the $C_j^*, j = 2, \dots, 1000$ by adding in growing order the points of each C_j^* but after few numerical experiments, a fixed combination of an IC and an FC together with an step ratio, $r^* = 1.08183839$, between shells makes possible to build an IF such that $\exists C_j \rightarrow C_j^*$. In our case, this convergence is done by a minimization procedure based on the CGM. The value r^* comes from the C_{13}^* , the icosahedron described in section 4.1. Using this particular icosahedron as a seed, the IF reported here can be reproduced. In addition, this is the only cluster where $ELJ(C_{13}) = ELJ(C_{13}^*)$. Note that the particular order of the sequence of points is very important as the Proposition 6 states, therefore tables 2-17 give all the coordinates of MIF1739.

Give the result in IF9483 is lengthy but with MIF1739 is a short way to present it. Meanwhile MIF1739 contains only 1739 points, the complete IF with the same property needs 9443 points. The number of points of the IF9483 comes from sum of the magic numbers of the particles of the complete shells IC and FC for the shells 0 to 11. Figure 2 depicts IF75, IF509, and IF9483. Figure 3 depicts MIF1739 alone and inside of an IF9483.

The construction of the MIF1739 is done by the following algorithm:

1. C'_{1000} is a rotation of C_{1000} to set as many particles as possible of the last shell over the semi-axes Y^+ .
2. for $j=999, 2 C'_j = \min \text{Adj}(C'_{j+1}, C_j)$ over all rotations of C_j based on the symmetry of the centered icosahedron of IF.
3. end for
4. $\text{MIF} = \cup_{j=2, \dots, 1000} C'_j$

Remark 4. In the step 3, for the clusters that are not centered IC or FC as the C_{38}^*, C_{98}^* and the Ino's decahedrons the rotation are five and they are around of the axes Y . In addition, these clusters exist on infinity positions of an infinite IF, therefore they were manually translated to closed position toward the center of IF and over the semi-axes Y^+ .

The tables 28-60 allow to build all the C_j^* from MIF1739. The algorithm is

1. $C_{1000} = \{p_i \in \text{MIF1739} \mid i \text{ is in the column On in tables 28-60 for } C_{1000}\}$.
2. $C_{1000}^* = \min(C_{1000})$.
3. for $j=999$ to 2
4. $C_j = C_{j+1} \setminus \{p_i \in \text{MIF1739} \mid i \text{ is in the column Off in tables 28-60 for } C_j\} \cup \{p_i \in \text{MIF} \mid i \text{ is in the column On in tables 28-60 for } C_j\}$
5. $C_j^* = \min(C_j)$.
6. end for.

The tables 18-27 give the type of the 999 clusters (1=IC, 2=Ino's decahedron (ID), 3=3 truncated octahedron (TO), 4=reserved, and 5=FC); the initial, optimal and difference of LJ, and the value of $\text{Adj}(C'_{j+1}, C_j)$ in MIF1739.

The classification of cluster is done automatically by identified the particles of a cluster with the type of particles of MIF1739, type is 1=IC when all the particles of a cluster are only IC around the center of IF, type is 2=ID if there is a particle in the cluster close to the center of mass of the cluster, such that it is over semi-axes Y^+ , type is 3=TO when all particles are IC and they are inside of a tetrahedron formed by three internal axis of the IF, type is 5=FC when at least one particle of the cluster is FC.

5.1 Methods for searching in IF

The classification of the algorithms for SOC has many different approaches [27]. Here tree classes are depicted on a scale from comparisons versus properties (necessary and sufficient conditions of a problem):

Exhaustive Algorithm It explores a search space of a problem verifying that the global optimum is founded. Here, for the comparisons an objective function is used to provide the way to determine the optimum. For small discrete and continuous problems, the algorithm's complexity is not an issue. There are many global optimization methods that work fine for low dimension problems. By example, the classical Grid Method divides the search space in small boxes. Therefore, it can locate the global minimum by an exhaustive searching. Generally, the complexity grows rapidly, exponentially and for the NP-Hard problems and there is not hope that exist a polynomial complexity algorithm.

Scout Algorithm It is a fact widely accepted that using previous knowledge and natural (Physical, Chemical, Thermodynamical, Biological, Medical, and so on) understanding of the process and phenomena involved in a problem will help to design an efficient method. Here, some authors argue about how much and what type of knowledge could be used. Other authors apply the rule: "Achievements kill doubt". From a practical point of view, this category contains algorithms that can use all or a part of whatever is available. Most of the methods for clusters optimization belong to this category. A method in this category could find a novel solution but lacking of guarantee of optimality. Most of the justifications for algorithm's efficiency are done by numerical experiments on a set of problems (benchmark). This type of analysis depends on the researcher and his/her particular computers and working conditions. Therefore, a claim that SOC can be done in polynomial time $O(n^3)$ is a very strong statement. If this could be extended and proved then the NP problems will be class P! Exploring IF is like a travel in one axes of the IF towards axes Y^+ . MIF1739 is also the minimum region to explore without duplications caused by the icosahedral symmetry.

Wizard Algorithm There are problems where necessary and sufficient conditions can be established for the optimality of the solution. Generally these methods are efficient and they do not need to do exhaustive comparisons. By example, an optimization problem with a convex function can be efficiently solved by the Conjugate Gradient method or by the large family of Newton and Quasi-Newton methods.

In [1] the Peeling Method was presented. This method is similar to the algorithm 4.1 of Maier *et al.* [15]. It executes a greedy strategy to set Off the particles on the outer shell of a cluster and to set On particles inside of a lattice that are neighbor of the previous ones. In this way, an small change is done and a minimization routine computes the potential of this cluster. The Modified Peeling Method has three basic options: forward, backward, itself. Moreover, the basic idea is to adjust a cluster by turning on a neighbor particle and turning Off a particle in the outer shell of a cluster or the centered particle. The complexity of each operation is $O(n^3)$ for a forward (C_n to C_{n+1}) and backward (C_n to C_{n-1}), and $O(n^4)$ for itself. These operations are quite similar to the proposed pivot algorithm [31], reverse greedy operator by Leary [13], the "final repair" step of Hartke [8], Fusion Process by adding one particle to C_n of Solov'yov *et al.* [24], and the greedy search method [29] but the novelty is that in right search space this Modified Peeling Method is capable to find new solutions or reproduce the exist ones.

Given $C_n = \{p_{i_1}, p_{i_2}, \dots, p_{i_n}\}$, $p_{i_j} \in \text{IF}$, $\forall j = 1, \dots, n$, computes the sets:

$$K_C = \{i_k \mid i_k \text{ such that } \exists p_{i_k} \in C_n, \exists p_{i_l} \in \text{IF} \setminus C_n, \text{ where } p_{i_k} \text{ and } p_{i_l} \text{ are neighbors or } i_l = 0 \text{ (centered particle of } C_n)\}.$$

$$K_{\text{IF}} = \{i_l \mid i_l \text{ such that } \exists p_{i_k} \in C_n, p_{i_l} \in \text{IF} \setminus C_n, \text{ where } p_{i_k} \text{ and } p_{i_l} \text{ are neighbors}\}.$$

The Modified Peeling Method is:

$$\text{forward } C_{n+1}^* = \min_{\text{set On } j \in K_{\text{IF}}} \{p_j\} \cup C_n \}.$$

$$\text{backward } C_{n-1}^* = \min_{\text{set Off } k \in K_C} C_n \setminus \{p_k\}.$$

$$\text{itself } C_n^* = \min_{\text{set Off } k \in K_C, \text{ set On } j \in K_{\text{IF}}} C_n \setminus \{p_k\} \cup \{p_j\}.$$

Remark 5. These operations do not guarantee global optimality.

For SOCD, it seems that a wise algorithm only could exist after founded the optimal clusters. One of the reason is that the global optimality is an open question for clusters with more than five particles [27]. The efficient method after founded the optimal cluster is a telephone directory method. This type of method uses a table with the data needed. The only operation is retrieving an entry of the table by an index. By example, a indexed table is $(t[1], \dots, t[K])$, $K \in \mathbb{N}$, $K > 0$ and the access consists in given $j \in [1, K]$ retrieve $t[j]$.

Proposition 8. The telephone directory method in Ω^o (see Proposition 2) has complexity $O(1)$.

Proof. Here, the only operation is to select the points of Ω^o from a table with the collection of the indexes of each optimal cluster. Therefore the complexity is only one operation. ■

Remark 6. Ω^o is not symmetric because the PES of small clusters. If the function s of the Proposition 6 exists, its complexity would be one!

Proposition 9. The telephone directory method on Ω^* , and particularly on IF has complexity $O(n^3)$.

Proof. This limit comes from the complexity of the relaxation multiplying by the complexity of the evaluation of a pair potential function for n particles. It is well know that the a minimization method as the CGM converges in at most the number of variables of the problem, which in this case is $3n$ and the worst case for evaluation of the potential is $O(n^2)$. ■

For space consideration, a table of the optimal clusters for a telephone directory method is not given. However, this table can be obtained from the tables 28-60. The algorithm for the telephone directory method on this table is:

1. $C_n = \{ p_i \in \text{MIF1739} \mid i \text{ is in the column On in the telephone table of optimal clusters} \}$.
2. $C_n^* = \min(C_n)$.

Remark 7. The second efficient and trivial method is the telephone directory method on MIF1739 or on IF9483, which has polynomial complexity $O(n^3)$ for SOCD(n). An estimation of complexity less than $O(n^3)$ by other authors is probably biased by the particular data and environment of their numerical experiments. It is possible that this small difference was influenced by the data over the number of iterative steps of the relaxation or minimization procedure on a very good initial population of clusters, which is highly possible if an algorithm gets initial random clusters from IC, ID, and FC lattices.

The results presented in the next Section show that optimal clusters are not always around on the same localization in IF. Therefore exploring IF by Exhaustive Algorithms is hard and it has exponential complexity caused by the combinations of possible particles.

Proposition 10. The function Adj is not bounded.

Proof. Let assume that $\exists M > 0$ such that $\text{Adj}(C_n, C_m) < M \forall n, m \geq 2$. This means that for $m \gg M$ because the number of adjust is bounded, the complexity of founding SOCD(m) from SOCD($m-1$) or from SOCD($m+1$) is $O(m^2)$ which imply the existence of the function s of Proposition 6. ■

Remark 8. Also, if Adj is bounded, the complexity of a telephone directory method in an sufficient large appropriate lattice IF or set Ω^l (see Proposition 2) is greater than SOCD(m) for large clusters, which is also impossible, moreover then SOCD is not NP!

Adding previous knowledge to build an scout algorithm is seemed to be the way to address SOCD, and the complexity can be decreased by symmetry. However, it easy to see that exists a cluster where symmetry cannot reduce the worst case of the complete pair potential's evaluation for some clusters, which is $O(n^2)$. Finally, by the Proposition 9, $O(n^3)$ is a lower limit of the complexity of SOCD(n) in IF.

n	$E^{\text{new}*}$	$E^{\text{old}*}$	$E^{\text{new}*} - E^{\text{old}*}$	T
537	-3659.52825	-3659.70629	-0.17804	1
542	-3698.95403	-3699.22727	-0.27324	1/CV
543	-3706.94784	-3708.21090	-1.26306	1/CV
546	-3730.50408	-3730.69222	-0.18814	1/CV
547	-3738.38788	-3738.68065	-0.29277	1/CV
548	-3746.37071	-3747.67942	-1.30871	1/CV
664	-4596.1978	-4596.1971	-0.0007	2
813	-5712.2517	-5712.2506	-0.0011	1

Table 1: Novel C_n^* .

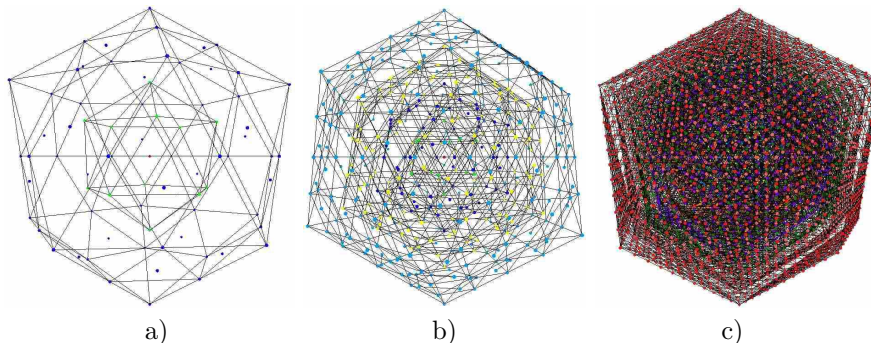


Figure 2: a) IF75, b) IF509, and c) IF9483, where IF = IC \cup FC.

6 Results

MIF1739 is a discrete lattice for LJ where $\exists C_n$, such that $C_n^* = \min(C_n)$ under LJ and C_n^* is the putative optimal cluster for $n = 2, \dots, 1000$. I took the data from CCD [26] to verify that my results. Data for C_n^* $n = 148, \dots, 309$ came from Romero, Barrón, and Gómez [20] and data for C_n^* , $n = 310, \dots, 1000$ came from the recently results of Shao *et al.* [30, 29]. I was able to repeat and even improve some of the putative optimal LJ clusters. From this comparison new putative optimal LJ clusters are C_{537}^* , C_{542}^* , C_{543}^* , C_{546}^* , C_{547}^* , C_{548}^* , C_{664}^* , and C_{813}^* . The particular interest are the C_{542}^* , C_{543}^* , C_{546}^* , C_{547}^* , and C_{548}^* because to my knowledge they are first optimal LJ clusters type IC with central vacancy (CV) reported in the shell 310-561. The prediction of CV was stated in [22] for the next shell, 562-923. Table 1 summarizes these new results.

What is easy to accept from our classification is that a cluster type ID is contained on any of the twelve axis of symmetry of IF (here the clusters type ID are on the semi-axis Y^+), a cluster type TO is in a centered tetrahedron formed by the center and three axis of symmetry forming four triangular faces. One controversial result of this automatic classification is the cluster's type for C_{98}^* also, this is the only cluster in MIF1739 where the adjacency matrix [9] is not the same between C_{98} and C_{98}^* , however, $C_{98}^* = \min(C_{98})$. The right type of C_{98}^* is tetrahedral (depicted by Leary [14]). The different type reported here comes from the distance between C_{98} and C_{98}^* but it is a fact that the basin around C_{98}^* attracts this C_{98} of type FC. Figures 8 and 9 depict novel views of C_{98} and C_{98}^* .

Figure 7 a) depicts C_{664}^* inside of IF9483 and b) depicts C_{664}^* as ID.

Wales and Doye [25] have been used basin for searching optimal LJ clusters and get through the barrier of the PES caused by the deformation of the particles on the surface. Figure 6 gives another perspective of this. Because, C_{37}^* and C_{39}^* are close to the center of IF, C_{38}^* is a jump from the center of IF to the first truncated octahedron in one of the tetrahedron formed by three axes of symmetry of IF. From table 60, the indices of IF for these three clusters show that they do not share any particle. This is the unique case in the results where there is not intersection between three consecutive clusters. Figure 6 a) depicts C_{38}^* with gradient, where $\|\nabla VXX(x^*)\| \sim 3.7 \cdot 10^{-6}$. The gradient looks big by the normalization. The gradient of C_{38}^* shows that this cluster is stable and elastic in the sense that it can be deformed by $\alpha \nabla VXX(x^*)$ for some α and with a minimization

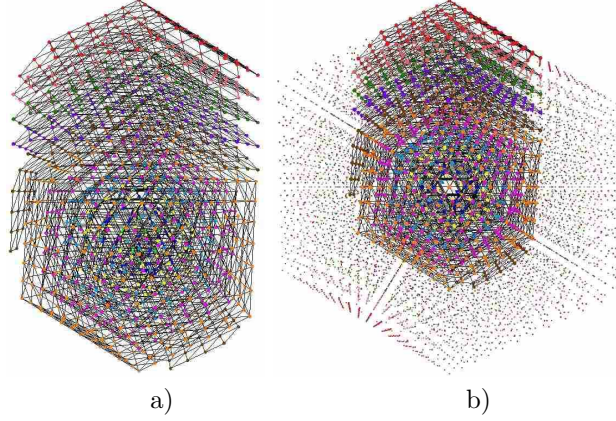


Figure 3: a) MIF1739 and b) MIF1739 inside of IF9483. MIF1739 and IF9483 contain C_n , such that $C_n^* = \min(C_n)$ $n = 2, \dots, 1000$.

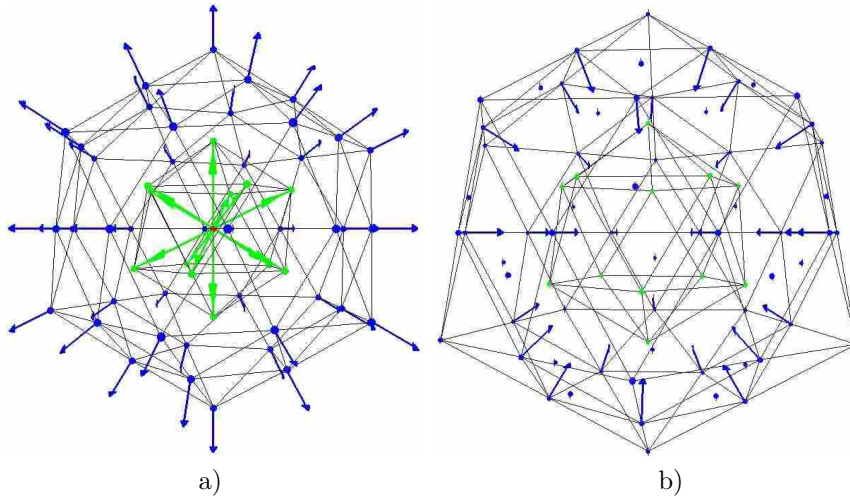


Figure 4: a) $C_{55}^* = IC55^*$ and b) IF75 with gradient.

routine, the deformed C_{38} will return to C_{38}^* . The gradient of the thirty-two particles in the outer shell point toward the center and the six particles of the inner octahedron shell point towards the square faces of the outer shell making this cluster stable to twisting deformations.

Figure 4 a) depicts C_{55}^* with gradient. Here the gradient shows that the particles on the top of the outer shell can move to close positions around the semi-axes Y^+ , in similar way for the bottom. The gradient of the particles in the inner icosahedron points in diametrical directions and if this effect is combined with an incomplete outer shell is possible to have great displacement of particles from their positions on IF and, also, a possible twisting and shrinking on the top or bottom cap of a cluster. Similar results can be seen for the gradient of C_{147}^* depicted in figure 5 a).

The graphical representation of the gradient helped to design IF. Our selection of the shell's step size is to have the corresponding component of the gradient for the particles IC and FC pointed towards $(0, 0, 0)$. Figures 4 b) and 5 b) depicted IF75 and IF227 with their gradient.

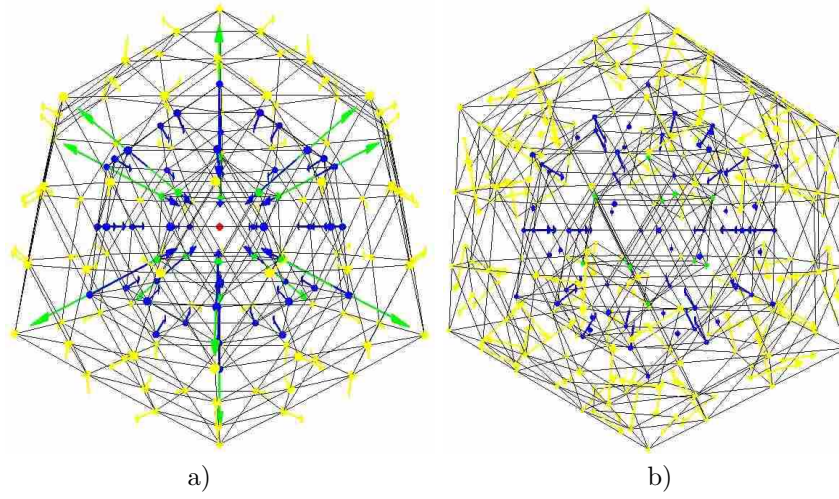


Figure 5: a) $C_1^*47=IC147^*$ and b) IF227 with gradient.

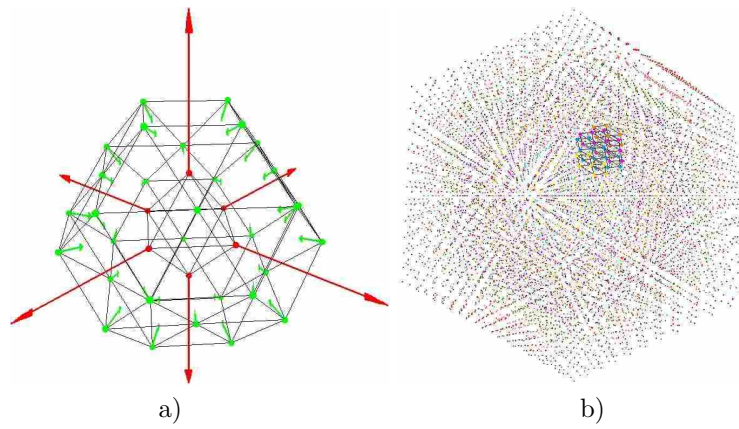


Figure 6: a) C_{38}^* with gradient and b) C_{38} inside of IF9483.

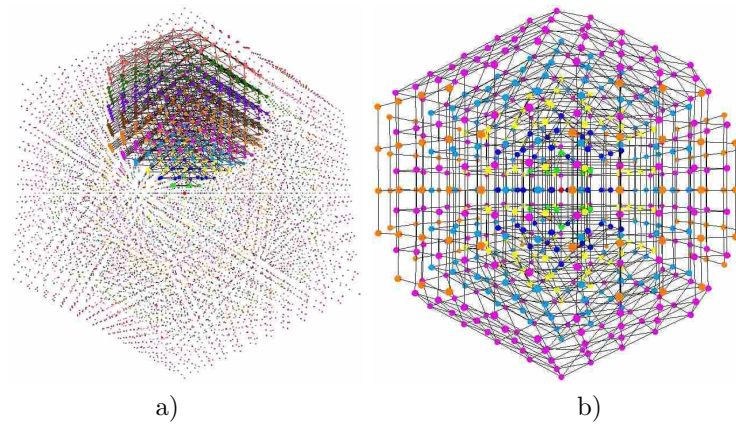


Figure 7: a) C_{664} inside of IF9483 and b) C_{664}^* .

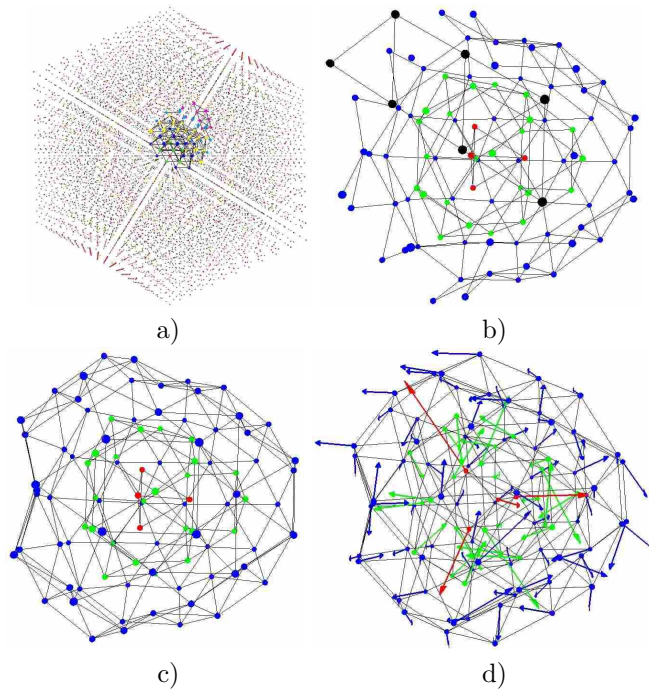


Figure 8: a) C_{98} inside of IF9483, b) C_{98} , c) C_{98}^* , and d) C_{98}^* with gradient.

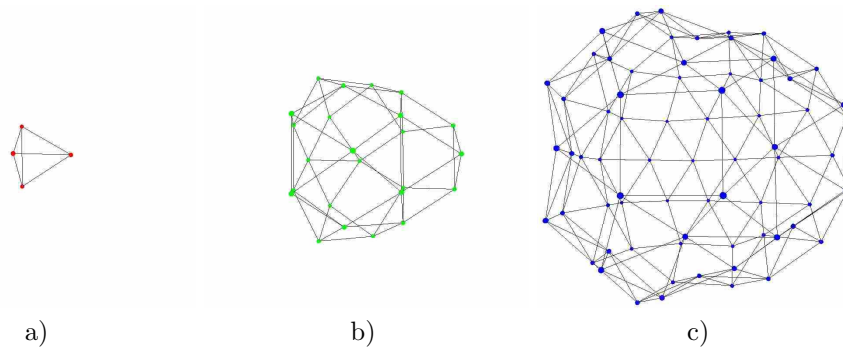


Figure 9: Novel views of tetrahedral shells of C_{98}^* a) interior shell with 4 particles, b) medium shell with 24, and c) outer shell with 70 particles.

#	i_p	X	Y	Z	#	i_p	X	Y	Z
1	1	0.00000000	0.00000000	0.00000000	56	56	0.84442563	1.36630937	-0.61351113
2	2	0.00000000	1.08183839	0.00000000	57	57	1.36630937	0.32254189	-0.99268187
3	3	0.96762567	0.48381284	0.00000000	58	58	1.68885127	-0.32254189	0.00000000
4	4	0.29901278	0.48381284	-0.92026670	59	59	1.04376748	-1.36630937	0.00000000
5	5	-0.78282561	0.48381284	-0.56875610	60	60	-0.32254189	1.36630937	-0.99268187
6	6	-0.78282561	0.48381284	0.56875610	61	61	-0.52188374	0.32254189	-1.60619300
7	7	0.29901278	0.48381284	0.92026670	62	62	0.52188374	-0.32254189	-1.60619300
8	8	0.78282561	-0.48381284	-0.56875610	63	63	0.32254189	-1.36630937	-0.99268187
9	9	-0.29901278	-0.48381284	-0.92026670	64	66	-1.36630937	-0.32254189	-0.99268187
10	10	-0.96762567	-0.48381284	0.00000000	65	67	-0.84442563	-1.36630937	-0.61351113
11	11	-0.29901278	-0.48381284	0.92026670	66	68	-0.32254189	1.36630937	0.99268187
12	12	0.78282561	-0.48381284	0.56875610	67	72	0.84442563	1.36630937	0.61351113
13	13	0.00000000	-1.08183839	0.00000000	68	73	1.36630937	0.32254189	0.99268187
14	14	0.00000000	2.16367678	0.00000000	69	74	0.52188374	-0.32254189	1.60619300
15	15	0.96762567	1.56565123	0.00000000	70	75	0.32254189	-1.36630937	0.99268187
16	16	0.29901278	1.56565123	-0.92026670	71	76	0.00000000	3.24551517	0.00000000
17	17	-0.78282561	1.56565123	-0.56875610	72	77	0.96762567	2.64748962	0.00000000
18	18	-0.78282561	1.56565123	0.56875610	73	78	0.29901278	2.64748962	-0.92026670
19	19	0.29901278	1.56565123	0.92026670	74	79	-0.78282561	2.64748962	-0.56875610
20	20	1.93525134	0.96762567	0.00000000	75	80	-0.78282561	2.64748962	0.56875610
21	21	1.26663845	0.96762567	-0.92026670	76	81	0.29901278	2.64748962	0.92026670
22	22	0.59802555	0.96762567	-1.84053340	77	82	1.93525134	2.04946406	0.00000000
23	23	-0.48381284	0.96762567	-1.48902280	78	83	1.26663845	2.04946406	-0.92026670
24	24	-1.56565123	0.96762567	-1.13751220	79	84	0.59802555	2.04946406	-1.84053340
25	25	-1.56565123	0.96762567	0.00000000	80	85	-0.48381284	2.04946406	-1.48902280
26	26	-1.56565123	0.96762567	1.13751220	81	86	-1.56565123	2.04946406	-1.13751220
27	27	-0.48381284	0.96762567	1.48902280	82	87	-1.56565123	2.04946406	0.00000000
28	28	0.59802555	0.96762567	1.84053340	83	88	-1.56565123	2.04946406	1.13751220
29	29	1.26663845	0.96762567	0.92026670	84	89	-0.48381284	2.04946406	1.48902280
30	30	1.75045129	0.00000000	-0.56875610	85	90	0.59802555	2.04946406	1.84053340
31	31	1.08183839	0.00000000	-1.48902280	86	91	1.26663845	2.04946406	0.92026670
32	32	0.00000000	0.00000000	-1.84053340	87	92	2.90287702	1.45143851	0.00000000
33	33	-1.08183839	0.00000000	-1.48902280	88	93	2.23426412	1.45143851	-0.92026670
34	34	-1.75045129	0.00000000	-0.56875610	89	94	1.56565123	1.45143851	-1.84053340
35	35	-1.75045129	0.00000000	0.56875610	90	95	0.89703833	1.45143851	-2.76080010
36	36	-1.08183839	0.00000000	1.48902280	91	96	-0.18480006	1.45143851	-2.40928950
37	37	0.00000000	0.00000000	1.84053340	92	97	-1.26663845	1.45143851	-2.05777890
38	38	1.08183839	0.00000000	1.48902280	93	98	-2.34847684	1.45143851	-1.70626830
39	39	1.75045129	0.00000000	0.56875610	94	99	-2.34847684	1.45143851	-0.56875610
40	40	1.56565123	-0.96762567	-1.13751220	95	100	-2.34847684	1.45143851	0.56875610
41	41	0.48381284	-0.96762567	-1.48902280	96	101	-2.34847684	1.45143851	1.70626830
42	42	-0.59802555	-0.96762567	-1.84053340	97	102	-1.26663845	1.45143851	2.05777890
43	43	-1.26663845	-0.96762567	-0.92026670	98	103	-0.18480006	1.45143851	2.40928950
44	44	-1.93525134	-0.96762567	0.00000000	99	104	0.89703833	1.45143851	2.76080010
45	45	-1.26663845	-0.96762567	0.92026670	100	105	1.56565123	1.45143851	1.84053340
46	46	-0.59802555	-0.96762567	1.84053340	101	106	2.23426412	1.45143851	0.92026670
47	47	0.48381284	-0.96762567	1.48902280	102	107	2.71807696	0.48381284	-0.56875610
48	48	1.56565123	-0.96762567	1.13751220	103	108	2.04946406	0.48381284	-1.48902280
49	49	1.56565123	-0.96762567	0.00000000	104	109	1.38085117	0.48381284	-2.40928950
50	50	0.78282561	-1.56565123	-0.56875610	105	110	0.29901278	0.48381284	-2.76080010
51	51	-0.29901278	-1.56565123	-0.92026670	106	111	-0.78282561	0.48381284	-2.40928950
52	52	-0.96762567	-1.56565123	0.00000000	107	112	-1.86466400	0.48381284	-2.05777890
53	53	-0.29901278	-1.56565123	0.92026670	108	113	-2.53327690	0.48381284	-1.13751220
54	54	0.78282561	-1.56565123	0.56875610	109	114	-2.53327690	0.48381284	0.00000000
55	55	0.00000000	-2.16367678	0.00000000	110	115	-2.53327690	0.48381284	1.13751220

Table 2: MIF1739 contains C_n , such that $C_n^* = \min(C_n)$ $n = 2, \dots, 1000$.

#	i_p	X	Y	Z	#	i_p	X	Y	Z
111	116	-1.86466400	0.48381284	2.05777890	166	171	2.15891033	-0.22453832	-1.56854017
112	117	-0.78282561	0.48381284	2.40928950	167	172	2.36183488	0.83798841	-0.94400263
113	118	0.29901278	0.48381284	2.76080010	168	173	1.62764697	0.83798841	-1.95452560
114	119	1.38085117	0.48381284	2.40928950	169	174	2.46563538	-0.83798841	-0.62453754
115	120	2.04946406	0.48381284	1.48902280	170	175	2.66855993	0.22453832	0.00000000
116	121	2.71807696	0.48381284	0.56875610	171	176	2.46563538	-0.83798841	0.62453754
117	122	2.53327690	-0.48381284	-1.13751220	172	177	1.85218529	-1.83057152	-0.62453754
118	123	1.86466400	-0.48381284	-2.05777890	173	178	0.99258310	-2.48724915	0.00000000
119	124	0.78282561	-0.48381284	-2.40928950	174	179	1.85218529	-1.83057152	0.62453754
120	125	-0.29901278	-0.48381284	-2.76080010	175	180	-0.30672505	2.48724915	-0.94400263
121	126	-1.38085117	-0.48381284	-2.40928950	176	181	0.02161377	1.83057152	-1.95452560
122	127	-2.04946406	-0.48381284	-1.48902280	177	182	-1.16632723	1.83057152	-1.56854017
123	128	-2.71807696	-0.48381284	-0.56875610	178	183	-0.82463037	-0.22453832	-2.53795131
124	129	-2.71807696	-0.48381284	0.56875610	179	184	-0.16795273	0.83798841	-2.53795131
125	130	-2.04946406	-0.48381284	1.48902280	180	185	-1.35589374	0.83798841	-2.15196588
126	131	-1.38085117	-0.48381284	2.40928950	181	186	0.16795273	-0.83798841	-2.53795131
127	132	-0.29901278	-0.48381284	2.76080010	182	187	0.82463037	0.22453832	-2.53795131
128	133	0.78282561	-0.48381284	2.40928950	183	188	1.35589374	-0.83798841	-2.15196588
129	134	1.86466400	-0.48381284	2.05777890	184	189	-0.02161377	-1.83057152	-1.95452560
130	135	2.53327690	-0.48381284	1.13751220	185	190	0.30672505	-2.48724915	-0.94400263
131	136	2.53327690	-0.48381284	0.00000000	186	191	1.16632723	-1.83057152	-1.56854017
132	137	2.34847684	-1.45143851	-1.70626830	187	192	-0.99258310	2.48724915	0.00000000
133	138	1.26663845	-1.45143851	-2.05777890	188	193	-1.85218529	1.83057152	-0.62453754
134	139	0.18480006	-1.45143851	-2.40928950	189	194	-1.85218529	1.83057152	0.62453754
135	140	-0.89703833	-1.45143851	-2.76080010	190	195	-2.66855993	-0.22453832	0.00000000
136	141	-1.56565123	-1.45143851	-1.84053340	191	196	-2.46563538	0.83798841	-0.62453754
137	142	-2.23426412	-1.45143851	-0.92026670	192	197	-2.46563538	0.83798841	0.62453754
138	143	-2.90287702	-1.45143851	0.00000000	193	204	-0.30672505	2.48724915	0.94400263
139	144	-2.23426412	-1.45143851	0.92026670	194	205	-1.16632723	1.83057152	1.56854017
140	145	-1.56565123	-1.45143851	1.84053340	195	206	0.02161377	1.83057152	1.95452560
141	146	-0.89703833	-1.45143851	2.76080010	196	207	-0.82463037	-0.22453832	2.53795131
142	147	0.18480006	-1.45143851	2.40928950	197	208	-1.35589374	0.83798841	2.15196588
143	148	1.26663845	-1.45143851	2.05777890	198	209	-0.16795273	0.83798841	2.53795131
144	149	2.34847684	-1.45143851	1.70626830	199	216	0.80301660	2.48724915	0.58342571
145	150	2.34847684	-1.45143851	0.56875610	200	217	1.13135542	1.83057152	1.59394868
146	151	2.34847684	-1.45143851	-0.56875610	201	218	1.86554333	1.83057152	0.58342571
147	152	1.56565123	-2.04946406	-1.13751220	202	219	2.15891033	-0.22453832	1.56854017
148	153	0.48381284	-2.04946406	-1.48902280	203	220	1.62764697	0.83798841	1.95452560
149	154	-0.59802555	-2.04946406	-1.84053340	204	221	2.36183488	0.83798841	0.94400263
150	155	-1.26663845	-2.04946406	-0.92026670	205	222	1.35589374	-0.83798841	2.15196588
151	156	-1.93525134	-2.04946406	0.00000000	206	223	0.82463037	0.22453832	2.53795131
152	157	-1.26663845	-2.04946406	0.92026670	207	224	0.16795273	-0.83798841	2.53795131
153	158	-0.59802555	-2.04946406	1.84053340	208	225	1.16632723	-1.83057152	1.56854017
154	159	0.48381284	-2.04946406	1.48902280	209	226	0.30672505	-2.48724915	0.94400263
155	160	1.56565123	-2.04946406	1.13751220	210	227	-0.02161377	-1.83057152	1.95452560
156	161	1.56565123	-2.04946406	0.00000000	211	228	0.00000000	4.32735356	0.00000000
157	162	0.78282561	-2.64748962	-0.56875610	212	229	0.96762567	3.72932801	0.00000000
158	163	-0.29901278	-2.64748962	-0.92026670	213	230	0.29901278	3.72932801	-0.92026670
159	164	-0.96762567	-2.64748962	0.00000000	214	231	-0.78282561	3.72932801	-0.56875610
160	165	-0.29901278	-2.64748962	0.92026670	215	232	-0.78282561	3.72932801	0.56875610
161	166	0.78282561	-2.64748962	0.56875610	216	233	0.29901278	3.72932801	0.92026670
162	167	0.00000000	-3.24551517	0.00000000	217	234	1.93525134	3.13130245	0.00000000
163	168	0.80301660	2.48724915	-0.58342571	218	235	1.26663845	3.13130245	-0.92026670
164	169	1.86554333	1.83057152	-0.58342571	219	236	0.59802555	3.13130245	-1.84053340
165	170	1.13135542	1.83057152	-1.59394868	220	237	-0.48381284	3.13130245	-1.48902280

Table 3: MIF1739 contains C_n , such that $C_n^* = \min(C_n)$ $n = 2, \dots, 1000$ (cont.)

#	i_p	X	Y	Z	#	i_p	X	Y	Z
221	238	-1.56565123	3.13130245	-1.13751220	276	293	-0.48381284	0.96762567	3.32955620
222	239	-1.56565123	3.13130245	0.00000000	277	294	0.59802555	0.96762567	3.68106680
223	240	-1.56565123	3.13130245	1.13751220	278	295	1.67986394	0.96762567	3.32955620
224	241	-0.48381284	3.13130245	1.48902280	279	296	2.34847684	0.96762567	2.40928950
225	242	0.59802555	3.13130245	1.84053340	280	297	3.01708973	0.96762567	1.48902280
226	243	1.26663845	3.13130245	0.92026670	281	298	3.68570263	0.96762567	0.56875610
227	244	2.90287702	2.53327690	0.00000000	282	299	3.50090257	0.00000000	-1.13751220
228	245	2.23426412	2.53327690	-0.92026670	283	300	2.83228968	0.00000000	-2.05777890
229	246	1.56565123	2.53327690	-1.84053340	284	301	2.16367678	0.00000000	-2.97804560
230	247	0.89703833	2.53327690	-2.76080010	285	302	1.08183839	0.00000000	-3.32955620
231	248	-0.18480006	2.53327690	-2.40928950	286	303	0.00000000	0.00000000	-3.68106680
232	249	-1.26663845	2.53327690	-2.05777890	287	304	-1.08183839	0.00000000	-3.32955620
233	250	-2.34847684	2.53327690	-1.70626830	288	305	-2.16367678	0.00000000	-2.97804560
234	251	-2.34847684	2.53327690	-0.56875610	289	306	-2.83228968	0.00000000	-2.05777890
235	252	-2.34847684	2.53327690	0.56875610	290	307	-3.50090257	0.00000000	-1.13751220
236	253	-2.34847684	2.53327690	1.70626830	291	308	-3.50090257	0.00000000	0.00000000
237	254	-1.26663845	2.53327690	2.05777890	292	309	-3.50090257	0.00000000	1.13751220
238	255	-0.18480006	2.53327690	2.40928950	293	310	-2.83228968	0.00000000	2.05777890
239	256	0.89703833	2.53327690	2.76080010	294	311	-2.16367678	0.00000000	2.97804560
240	257	1.56565123	2.53327690	1.84053340	295	312	-1.08183839	0.00000000	3.32955620
241	258	2.23426412	2.53327690	0.92026670	296	313	0.00000000	0.00000000	3.68106680
242	259	3.87050269	1.93525134	0.00000000	297	314	1.08183839	0.00000000	3.32955620
243	260	3.20188979	1.93525134	-0.92026670	298	315	2.16367678	0.00000000	2.97804560
244	261	2.53327690	1.93525134	-1.84053340	299	316	2.83228968	0.00000000	2.05777890
245	262	1.86466400	1.93525134	-2.76080010	300	317	3.50090257	0.00000000	1.13751220
246	263	1.19605111	1.93525134	-3.68106680	301	318	3.50090257	0.00000000	0.00000000
247	264	0.11421272	1.93525134	-3.32955620	302	319	3.31610251	-0.96762567	-1.70626830
248	265	-0.96762567	1.93525134	-2.97804560	303	320	2.64748962	-0.96762567	-2.62653500
249	266	-2.04946406	1.93525134	-2.62653500	304	321	1.56565123	-0.96762567	-2.97804560
250	267	-3.13130245	1.93525134	-2.27502440	305	322	0.48381284	-0.96762567	-3.32955620
251	268	-3.13130245	1.93525134	-1.13751220	306	323	-0.59802555	-0.96762567	-3.68106680
252	269	-3.13130245	1.93525134	0.00000000	307	324	-1.67986394	-0.96762567	-3.32955620
253	270	-3.13130245	1.93525134	1.13751220	308	325	-2.34847684	-0.96762567	-2.40928950
254	271	-3.13130245	1.93525134	2.27502440	309	326	-3.01708973	-0.96762567	-1.48902280
255	272	-2.04946406	1.93525134	2.62653500	310	327	-3.68570263	-0.96762567	-0.56875610
256	273	-0.96762567	1.93525134	2.97804560	311	328	-3.68570263	-0.96762567	0.56875610
257	274	0.11421272	1.93525134	3.32955620	312	329	-3.01708973	-0.96762567	1.48902280
258	275	1.19605111	1.93525134	3.68106680	313	330	-2.34847684	-0.96762567	2.40928950
259	276	1.86466400	1.93525134	2.76080010	314	331	-1.67986394	-0.96762567	3.32955620
260	277	2.53327690	1.93525134	1.84053340	315	332	-0.59802555	-0.96762567	3.68106680
261	278	3.20188979	1.93525134	0.92026670	316	333	0.48381284	-0.96762567	3.32955620
262	279	3.68570263	0.96762567	-0.56875610	317	334	1.56565123	-0.96762567	2.97804560
263	280	3.01708973	0.96762567	-1.48902280	318	335	2.64748962	-0.96762567	2.62653500
264	281	2.34847684	0.96762567	-2.40928950	319	336	3.31610251	-0.96762567	1.70626830
265	282	1.67986394	0.96762567	-3.32955620	320	337	3.31610251	-0.96762567	0.56875610
266	283	0.59802555	0.96762567	-3.68106680	321	338	3.31610251	-0.96762567	-0.56875610
267	284	-0.48381284	0.96762567	-3.32955620	322	339	3.13130245	-1.93525134	-2.27502440
268	285	-1.56565123	0.96762567	-2.97804560	323	340	2.04946406	-1.93525134	-2.62653500
269	286	-2.64748962	0.96762567	-2.62653500	324	341	0.96762567	-1.93525134	-2.97804560
270	287	-3.31610251	0.96762567	-1.70626830	325	342	-0.11421272	-1.93525134	-3.32955620
271	288	-3.31610251	0.96762567	-0.56875610	326	343	-1.19605111	-1.93525134	-3.68106680
272	289	-3.31610251	0.96762567	0.56875610	327	344	-1.86466400	-1.93525134	-2.76080010
273	290	-3.31610251	0.96762567	1.70626830	328	345	-2.53327690	-1.93525134	-1.84053340
274	291	-2.64748962	0.96762567	2.62653500	329	346	-3.20188979	-1.93525134	-0.92026670
275	292	-1.56565123	0.96762567	2.97804560	330	347	-3.87050269	-1.93525134	0.00000000

Table 4: MIF1739 contains C_n , such that $C_n^* = \min(C_n)$ $n = 2, \dots, 1000$ (cont.)

#	i_p	X	Y	Z	#	i_p	X	Y	Z
331	348	-3.20188979	-1.93525134	0.92026670	386	416	-1.97744435	2.30531085	-2.14059242
332	349	-2.53327690	-1.93525134	1.84053340	387	417	-0.81793346	2.30531085	-2.51734034
333	350	-1.86466400	-1.93525134	2.76080010	388	418	-1.13841439	2.94627270	-1.53100147
334	351	-1.19605111	-1.93525134	3.68106680	389	419	0.02109650	2.94627270	-1.90774939
335	352	-0.11421272	-1.93525134	3.32955620	390	438	-0.96882835	3.58723456	0.00000000
336	353	0.96762567	-1.93525134	2.97804560	391	439	-2.64688828	2.30531085	-1.21918190
337	354	2.04946406	-1.93525134	2.62653500	392	440	-2.64688828	2.30531085	1.21918190
338	355	3.13130245	-1.93525134	2.27502440	393	441	-2.64688828	2.30531085	0.00000000
339	356	3.13130245	-1.93525134	1.13751220	394	442	-1.80785831	2.94627270	0.60959095
340	357	3.13130245	-1.93525134	0.00000000	395	443	-1.80785831	2.94627270	-0.60959095
341	358	3.13130245	-1.93525134	-1.13751220	396	462	-0.29938442	3.58723456	0.92141052
342	359	2.34847684	-2.53327690	-1.70626830	397	463	-1.97744435	2.30531085	2.14059242
343	360	1.26663845	-2.53327690	-2.05777890	398	464	0.34157743	2.30531085	2.89408827
344	361	0.18480006	-2.53327690	-2.40928950	399	465	-0.81793346	2.30531085	2.51734034
345	362	-0.89703833	-2.53327690	-2.76080010	400	466	0.02109650	2.94627270	1.90774939
346	363	-1.56565123	-2.53327690	-1.84053340	401	467	-1.13841439	2.94627270	1.53100147
347	364	-2.23426412	-2.53327690	-0.92026670	402	468	-1.12537603	-0.73771364	3.46355129
348	365	-2.90287702	-2.53327690	0.00000000	403	469	-2.16247410	1.33648249	2.71005543
349	366	-2.23426412	-2.53327690	0.92026670	404	470	0.15654768	1.33648249	3.46355129
350	367	-1.56565123	-2.53327690	1.84053340	405	471	-1.00296321	1.33648249	3.08680336
351	368	-0.89703833	-2.53327690	2.76080010	406	472	-0.48441418	0.29938442	3.46355129
352	369	0.18480006	-2.53327690	2.40928950	407	473	-1.64392507	0.29938442	3.08680336
353	370	1.26663845	-2.53327690	2.05777890	408	486	0.78379860	3.58723456	0.56946302
354	371	2.34847684	-2.53327690	1.70626830	409	487	1.42476046	2.30531085	2.54214077
355	372	2.34847684	-2.53327690	0.56875610	410	488	2.85799474	2.30531085	0.56946302
356	373	2.34847684	-2.53327690	-0.56875610	411	489	2.14137760	2.30531085	1.55580189
357	374	1.56565123	-3.13130245	-1.13751220	412	490	1.82089667	2.94627270	0.56946302
358	375	0.48381284	-3.13130245	-1.48902280	413	491	1.10427953	2.94627270	1.55580189
359	376	-0.59802555	-3.13130245	-1.84053340	414	510	0.00000000	5.40919195	0.00000000
360	377	-1.26663845	-3.13130245	-0.92026670	415	511	0.96762567	4.81116640	0.00000000
361	378	-1.93525134	-3.13130245	0.00000000	416	512	0.29901278	4.81116640	-0.92026670
362	379	-1.26663845	-3.13130245	0.92026670	417	513	-0.78282561	4.81116640	-0.56875610
363	380	-0.59802555	-3.13130245	1.84053340	418	514	-0.78282561	4.81116640	0.56875610
364	381	0.48381284	-3.13130245	1.48902280	419	515	0.29901278	4.81116640	0.92026670
365	382	1.56565123	-3.13130245	1.13751220	420	516	1.93525134	4.21314084	0.00000000
366	383	1.56565123	-3.13130245	0.00000000	421	517	1.26663845	4.21314084	-0.92026670
367	384	0.78282561	-3.72932801	-0.56875610	422	518	0.59802555	4.21314084	-1.84053340
368	385	-0.29901278	-3.72932801	-0.92026670	423	519	-0.48381284	4.21314084	-1.48902280
369	386	-0.96762567	-3.72932801	0.00000000	424	520	-1.56565123	4.21314084	-1.13751220
370	387	-0.29901278	-3.72932801	0.92026670	425	521	-1.56565123	4.21314084	0.00000000
371	388	0.78282561	-3.72932801	0.56875610	426	522	-1.56565123	4.21314084	1.13751220
372	389	0.00000000	-4.32735356	0.00000000	427	523	-0.48381284	4.21314084	1.48902280
373	390	0.78379860	3.58723456	-0.56946302	428	524	0.59802555	4.21314084	1.84053340
374	391	2.85799474	2.30531085	-0.56946302	429	525	1.26663845	4.21314084	0.92026670
375	392	1.42476046	2.30531085	-2.54214077	430	526	2.90287702	3.61511529	0.00000000
376	393	2.14137760	2.30531085	-1.55580189	431	527	2.23426412	3.61511529	-0.92026670
377	394	1.10427953	2.94627270	-1.55580189	432	528	1.56565123	3.61511529	-1.84053340
378	395	1.82089667	2.94627270	-0.56946302	433	529	0.89703833	3.61511529	-2.76080010
379	397	3.34240892	1.33648249	-0.92141052	434	530	-0.18480006	3.61511529	-2.40928950
380	398	1.90917463	1.33648249	-2.89408827	435	531	-1.26663845	3.61511529	-2.05777890
381	399	2.62579177	1.33648249	-1.90774939	436	532	-2.34847684	3.61511529	-1.70626830
382	400	2.42772367	0.29938442	-2.51734034	437	533	-2.34847684	3.61511529	-0.56875610
383	401	3.14434081	0.29938442	-1.53100147	438	534	-2.34847684	3.61511529	0.56875610
384	414	-0.29938442	3.58723456	-0.92141052	439	535	-2.34847684	3.61511529	1.70626830
385	415	0.34157743	2.30531085	-2.89408827	440	536	-1.26663845	3.61511529	2.05777890

Table 5: MIF1739 contains C_n , such that $C_n^* = \min(C_n)$ $n = 2, \dots, 1000$ (cont.)

#	i_p	X	Y	Z	#	i_p	X	Y	Z
441	537	-0.18480006	3.61511529	2.40928950	496	592	-0.18480006	1.45143851	-4.24982290
442	538	0.89703833	3.61511529	2.76080010	497	593	-1.26663845	1.45143851	-3.89831230
443	539	1.56565123	3.61511529	1.84053340	498	594	-2.34847684	1.45143851	-3.54680170
444	540	2.23426412	3.61511529	0.92026670	499	595	-3.43031523	1.45143851	-3.19529110
445	541	3.87050269	3.01708973	0.00000000	500	596	-4.09892812	1.45143851	-2.27502440
446	542	3.20188979	3.01708973	-0.92026670	501	597	-4.09892812	1.45143851	-1.13751220
447	543	2.53327690	3.01708973	-1.84053340	502	598	-4.09892812	1.45143851	0.00000000
448	544	1.86466400	3.01708973	-2.76080010	503	599	-4.09892812	1.45143851	1.13751220
449	545	1.19605111	3.01708973	-3.68106680	504	600	-4.09892812	1.45143851	2.27502440
450	546	0.11421272	3.01708973	-3.32955620	505	601	-3.43031523	1.45143851	3.19529110
451	547	-0.96762567	3.01708973	-2.97804560	506	602	-2.34847684	1.45143851	3.54680170
452	548	-2.04946406	3.01708973	-2.62653500	507	603	-1.26663845	1.45143851	3.89831230
453	549	-3.13130245	3.01708973	-2.27502440	508	604	-0.18480006	1.45143851	4.24982290
454	550	-3.13130245	3.01708973	-1.13751220	509	605	0.89703833	1.45143851	4.60133350
455	551	-3.13130245	3.01708973	0.00000000	510	606	1.97887672	1.45143851	4.24982290
456	552	-3.13130245	3.01708973	1.13751220	511	607	2.64748962	1.45143851	3.32955620
457	553	-3.13130245	3.01708973	2.27502440	512	608	3.31610251	1.45143851	2.40928950
458	554	-2.04946406	3.01708973	2.62653500	513	609	3.98471541	1.45143851	1.48902280
459	555	-0.96762567	3.01708973	2.97804560	514	610	4.65332830	1.45143851	0.56875610
460	556	0.11421272	3.01708973	3.32955620	515	611	4.46852824	0.48381284	-1.13751220
461	557	1.19605111	3.01708973	3.68106680	516	612	3.79991535	0.48381284	-2.05777890
462	558	1.86466400	3.01708973	2.76080010	517	613	3.13130245	0.48381284	-2.97804560
463	559	2.53327690	3.01708973	1.84053340	518	614	2.46268956	0.48381284	-3.89831230
464	560	3.20188979	3.01708973	0.92026670	519	615	1.38085117	0.48381284	-4.24982290
465	561	4.83812836	2.41906418	0.00000000	520	616	0.29901278	0.48381284	-4.60133350
466	562	4.16951547	2.41906418	-0.92026670	521	617	-0.78282561	0.48381284	-4.24982290
467	563	3.50090257	2.41906418	-1.84053340	522	618	-1.86466400	0.48381284	-3.89831230
468	564	2.83228968	2.41906418	-2.76080010	523	619	-2.94650239	0.48381284	-3.54680170
469	565	2.16367678	2.41906418	-3.68106680	524	620	-3.61511529	0.48381284	-2.62653500
470	566	1.49506388	2.41906418	-4.60133350	525	621	-4.28372818	0.48381284	-1.70626830
471	567	0.41322549	2.41906418	-4.24982290	526	622	-4.28372818	0.48381284	-0.56875610
472	568	-0.66861290	2.41906418	-3.89831230	527	623	-4.28372818	0.48381284	0.56875610
473	569	-1.75045129	2.41906418	-3.54680170	528	624	-4.28372818	0.48381284	1.70626830
474	570	-2.83228968	2.41906418	-3.19529110	529	625	-3.61511529	0.48381284	2.62653500
475	571	-3.91412807	2.41906418	-2.84378050	530	626	-2.94650239	0.48381284	3.54680170
476	572	-3.91412807	2.41906418	-1.70626830	531	627	-1.86466400	0.48381284	3.89831230
477	573	-3.91412807	2.41906418	-0.56875610	532	628	-0.78282561	0.48381284	4.24982290
478	574	-3.91412807	2.41906418	0.56875610	533	629	0.29901278	0.48381284	4.60133350
479	575	-3.91412807	2.41906418	1.70626830	534	630	1.38085117	0.48381284	4.24982290
480	576	-3.91412807	2.41906418	2.84378050	535	631	2.46268956	0.48381284	3.89831230
481	577	-2.83228968	2.41906418	3.19529110	536	632	3.13130245	0.48381284	2.97804560
482	578	-1.75045129	2.41906418	3.54680170	537	633	3.79991535	0.48381284	2.05777890
483	579	-0.66861290	2.41906418	3.89831230	538	634	4.46852824	0.48381284	1.13751220
484	580	0.41322549	2.41906418	4.24982290	539	635	4.46852824	0.48381284	0.00000000
485	581	1.49506388	2.41906418	4.60133350	540	636	4.28372818	-0.48381284	-1.70626830
486	582	2.16367678	2.41906418	3.68106680	541	637	3.61511529	-0.48381284	-2.62653500
487	583	2.83228968	2.41906418	2.76080010	542	638	2.94650239	-0.48381284	-3.54680170
488	584	3.50090257	2.41906418	1.84053340	543	639	1.86466400	-0.48381284	-3.89831230
489	585	4.16951547	2.41906418	0.92026670	544	640	0.78282561	-0.48381284	-4.24982290
490	586	4.65332830	1.45143851	-0.56875610	545	641	-0.29901278	-0.48381284	-4.60133350
491	587	3.98471541	1.45143851	-1.48902280	546	642	-1.38085117	-0.48381284	-4.24982290
492	588	3.31610251	1.45143851	-2.40928950	547	643	-2.46268956	-0.48381284	-3.89831230
493	589	2.64748962	1.45143851	-3.32955620	548	644	-3.13130245	-0.48381284	-2.97804560
494	590	1.97887672	1.45143851	-4.24982290	549	645	-3.79991535	-0.48381284	-2.05777890
495	591	0.89703833	1.45143851	-4.60133350	550	646	-4.46852824	-0.48381284	-1.13751220

Table 6: MIF1739 contains C_n , such that $C_n^* = \min(C_n)$ $n = 2, \dots, 1000$ (cont.)

#	i_p	X	Y	Z	#	i_p	X	Y	Z
551	647	-4.46852824	-0.48381284	0.00000000	606	702	-0.41322549	-2.41906418	4.24982290
552	648	-4.46852824	-0.48381284	1.13751220	607	703	0.66861290	-2.41906418	3.89831230
553	649	-3.79991535	-0.48381284	2.05777890	608	704	1.75045129	-2.41906418	3.54680170
554	650	-3.13130245	-0.48381284	2.97804560	609	705	2.83228968	-2.41906418	3.19529110
555	651	-2.46268956	-0.48381284	3.89831230	610	706	3.91412807	-2.41906418	2.84378050
556	652	-1.38085117	-0.48381284	4.24982290	611	707	3.91412807	-2.41906418	1.70626830
557	653	-0.29901278	-0.48381284	4.60133350	612	708	3.91412807	-2.41906418	0.56875610
558	654	0.78282561	-0.48381284	4.24982290	613	709	3.91412807	-2.41906418	-0.56875610
559	655	1.86466400	-0.48381284	3.89831230	614	710	3.91412807	-2.41906418	-1.70626830
560	656	2.94650239	-0.48381284	3.54680170	615	711	3.13130245	-3.01708973	-2.27502440
561	657	3.61511529	-0.48381284	2.62653500	616	712	2.04946406	-3.01708973	-2.62653500
562	658	4.28372818	-0.48381284	1.70626830	617	713	0.96762567	-3.01708973	-2.97804560
563	659	4.28372818	-0.48381284	0.56875610	618	714	-0.11421272	-3.01708973	-3.32955620
564	660	4.28372818	-0.48381284	-0.56875610	619	715	-1.19605111	-3.01708973	-3.68106680
565	661	4.09892812	-1.45143851	-2.27502440	620	716	-1.86466400	-3.01708973	-2.76080010
566	662	3.43031523	-1.45143851	-3.19529110	621	717	-2.53327690	-3.01708973	-1.84053340
567	663	2.34847684	-1.45143851	-3.54680170	622	718	-3.20188979	-3.01708973	-0.92026670
568	664	1.26663845	-1.45143851	-3.89831230	623	719	-3.87050269	-3.01708973	0.00000000
569	665	0.18480006	-1.45143851	-4.24982290	624	720	-3.20188979	-3.01708973	0.92026670
570	666	-0.89703833	-1.45143851	-4.60133350	625	721	-2.53327690	-3.01708973	1.84053340
571	667	-1.97887672	-1.45143851	-4.24982290	626	722	-1.86466400	-3.01708973	2.76080010
572	668	-2.64748962	-1.45143851	-3.32955620	627	723	-1.19605111	-3.01708973	3.68106680
573	669	-3.31610251	-1.45143851	-2.40928950	628	724	-0.11421272	-3.01708973	3.32955620
574	670	-3.98471541	-1.45143851	-1.48902280	629	725	0.96762567	-3.01708973	2.97804560
575	671	-4.65332830	-1.45143851	-0.56875610	630	726	2.04946406	-3.01708973	2.62653500
576	672	-4.65332830	-1.45143851	0.56875610	631	727	3.13130245	-3.01708973	2.27502440
577	673	-3.98471541	-1.45143851	1.48902280	632	728	3.13130245	-3.01708973	1.13751220
578	674	-3.31610251	-1.45143851	2.40928950	633	729	3.13130245	-3.01708973	0.00000000
579	675	-2.64748962	-1.45143851	3.32955620	634	730	3.13130245	-3.01708973	-1.13751220
580	676	-1.97887672	-1.45143851	4.24982290	635	731	2.34847684	-3.61511529	-1.70626830
581	677	-0.89703833	-1.45143851	4.60133350	636	732	1.26663845	-3.61511529	-2.05777890
582	678	0.18480006	-1.45143851	4.24982290	637	733	0.18480006	-3.61511529	-2.40928950
583	679	1.26663845	-1.45143851	3.89831230	638	734	-0.89703833	-3.61511529	-2.76080010
584	680	2.34847684	-1.45143851	3.54680170	639	735	-1.56565123	-3.61511529	-1.84053340
585	681	3.43031523	-1.45143851	3.19529110	640	736	-2.23426412	-3.61511529	-0.92026670
586	682	4.09892812	-1.45143851	2.27502440	641	737	-2.90287702	-3.61511529	0.00000000
587	683	4.09892812	-1.45143851	1.13751220	642	738	-2.23426412	-3.61511529	0.92026670
588	684	4.09892812	-1.45143851	0.00000000	643	739	-1.56565123	-3.61511529	1.84053340
589	685	4.09892812	-1.45143851	-1.13751220	644	740	-0.89703833	-3.61511529	2.76080010
590	686	3.91412807	-2.41906418	-2.84378050	645	741	0.18480006	-3.61511529	2.40928950
591	687	2.83228968	-2.41906418	-3.19529110	646	742	1.26663845	-3.61511529	2.05777890
592	688	1.75045129	-2.41906418	-3.54680170	647	743	2.34847684	-3.61511529	1.70626830
593	689	0.66861290	-2.41906418	-3.89831230	648	744	2.34847684	-3.61511529	0.56875610
594	690	-0.41322549	-2.41906418	-4.24982290	649	745	2.34847684	-3.61511529	-0.56875610
595	691	-1.49506388	-2.41906418	-4.60133350	650	746	1.56565123	-4.21314084	-1.13751220
596	692	-2.16367678	-2.41906418	-3.68106680	651	747	0.48381284	-4.21314084	-1.48902280
597	693	-2.83228968	-2.41906418	-2.76080010	652	748	-0.59802555	-4.21314084	-1.84053340
598	694	-3.50090257	-2.41906418	-1.84053340	653	749	-1.26663845	-4.21314084	-0.92026670
599	695	-4.16951547	-2.41906418	-0.92026670	654	750	-1.93525134	-4.21314084	0.00000000
600	696	-4.83812836	-2.41906418	0.00000000	655	751	-1.26663845	-4.21314084	0.92026670
601	697	-4.16951547	-2.41906418	0.92026670	656	752	-0.59802555	-4.21314084	1.84053340
602	698	-3.50090257	-2.41906418	1.84053340	657	753	0.48381284	-4.21314084	1.48902280
603	699	-2.83228968	-2.41906418	2.76080010	658	754	1.56565123	-4.21314084	1.13751220
604	700	-2.16367678	-2.41906418	3.68106680	659	755	1.56565123	-4.21314084	0.00000000
605	701	-1.49506388	-2.41906418	4.60133350	660	756	0.78282561	-4.81116640	-0.56875610

Table 7: MIF1739 contains C_n , such that $C_n^* = \min(C_n)$ $n = 2, \dots, 1000$ (cont.)

#	i_p	X	Y	Z	#	i_p	X	Y	Z
661	757	-0.29901278	-4.81116640	-0.92026670	716	962	0.00000000	6.49103034	0.00000000
662	758	-0.96762567	-4.81116640	0.00000000	717	963	0.96762567	5.89300479	0.00000000
663	759	-0.29901278	-4.81116640	0.92026670	718	964	0.29901278	5.89300479	-0.92026670
664	760	0.78282561	-4.81116640	0.56875610	719	965	-0.78282561	5.89300479	-0.56875610
665	761	0.00000000	-5.40919195	0.00000000	720	966	-0.78282561	5.89300479	0.56875610
666	767	1.40459143	3.41577344	-2.50615402	721	967	0.29901278	5.89300479	0.92026670
667	768	2.11106408	3.41577344	-1.53377783	722	968	1.93525134	5.29497923	0.00000000
668	770	1.08864726	4.04766179	-1.53377783	723	969	1.26663845	5.29497923	-0.92026670
669	882	-0.29514631	4.67955013	0.90836695	724	970	0.59802555	5.29497923	-1.84053340
670	884	0.65268621	2.78388509	3.82549550	725	971	-0.48381284	5.29497923	-1.48902280
671	885	-0.49041055	2.78388509	3.45408085	726	972	-1.56565123	5.29497923	-1.13751220
672	886	-1.63350731	2.78388509	3.08266620	727	973	-1.56565123	5.29497923	0.00000000
673	887	0.33674203	3.41577344	2.85311932	728	974	-1.56565123	5.29497923	1.13751220
674	888	-0.80635473	3.41577344	2.48170467	729	975	-0.48381284	5.29497923	1.48902280
675	889	-1.94945149	3.41577344	2.11029002	730	976	0.59802555	5.29497923	1.84053340
676	890	0.02079786	4.04766179	1.88074314	731	977	1.26663845	5.29497923	0.92026670
677	891	-1.12229890	4.04766179	1.50932848	732	978	2.90287702	4.69695368	0.00000000
678	892	-1.42538929	-1.23847892	4.38689716	733	979	2.23426412	4.69695368	-0.92026670
679	894	0.47027575	1.82877155	4.38689716	734	980	1.56565123	4.69695368	-1.84053340
680	895	-0.67282101	1.82877155	4.01548250	735	981	0.89703833	4.69695368	-2.76080010
681	896	-1.81591777	1.82877155	3.64406785	736	982	-0.18480006	4.69695368	-2.40928950
682	897	-0.16161259	0.80635473	4.38689716	737	983	-1.26663845	4.69695368	-2.05777890
683	898	-1.30470936	0.80635473	4.01548250	738	984	-2.34847684	4.69695368	-1.70626830
684	899	-2.44780612	0.80635473	3.64406785	739	985	-2.34847684	4.69695368	-0.56875610
685	900	-0.79350094	-0.21606210	4.38689716	740	986	-2.34847684	4.69695368	0.56875610
686	901	-1.93659770	-0.21606210	4.01548250	741	987	-2.34847684	4.69695368	1.70626830
687	922	0.77270308	4.67955013	0.56140165	742	988	-1.26663845	4.69695368	2.05777890
688	923	1.72053561	2.78388509	3.47853020	743	989	-0.18480006	4.69695368	2.40928950
689	924	3.83995356	2.78388509	0.56140165	744	990	0.89703833	4.69695368	2.76080010
690	925	3.13348091	2.78388509	1.53377783	745	991	1.56565123	4.69695368	1.84053340
691	926	2.42700826	2.78388509	2.50615402	746	992	2.23426412	4.69695368	0.92026670
692	927	2.81753673	3.41577344	0.56140165	747	993	3.87050269	4.09892812	0.00000000
693	928	2.11106408	3.41577344	1.53377783	748	994	3.20188979	4.09892812	-0.92026670
694	929	1.40459143	3.41577344	2.50615402	749	995	2.53327690	4.09892812	-1.84053340
695	930	1.79511991	4.04766179	0.56140165	750	996	1.86466400	4.09892812	-2.76080010
696	931	1.08864726	4.04766179	1.53377783	751	997	1.19605111	4.09892812	-3.68106680
697	932	3.73171761	-1.23847892	2.71125155	752	998	0.11421272	4.09892812	-3.32955620
698	933	2.19809237	1.82877155	3.82549550	753	999	-0.96762567	4.09892812	-2.97804560
699	935	3.61103768	1.82877155	1.88074314	754	1000	-2.04946406	4.09892812	-2.62653500
700	936	2.90456502	1.82877155	2.85311932	755	1001	-3.13130245	4.09892812	-2.27502440
701	937	4.12224609	0.80635473	1.50932848	756	1002	-3.13130245	4.09892812	-1.13751220
702	938	3.41577344	0.80635473	2.48170467	757	1003	-3.13130245	4.09892812	0.00000000
703	939	2.70930079	0.80635473	3.45408085	758	1004	-3.13130245	4.09892812	1.13751220
704	940	3.92698185	-0.21606210	2.11029002	759	1005	-3.13130245	4.09892812	2.27502440
705	941	3.22050920	-0.21606210	3.08266620	760	1006	-2.04946406	4.09892812	2.62653500
706	942	2.95901453	-1.82877155	3.27265320	761	1007	-0.96762567	4.09892812	2.97804560
707	943	1.42538929	1.23847892	4.38689716	762	1008	0.11421272	4.09892812	3.32955620
708	944	-0.47027575	-1.82877155	4.38689716	763	1009	1.19605111	4.09892812	3.68106680
709	945	0.16161259	-0.80635473	4.38689716	764	1010	1.86466400	4.09892812	2.76080010
710	946	0.79350094	0.21606210	4.38689716	765	1011	2.53327690	4.09892812	1.84053340
711	947	0.67282101	-1.82877155	4.01548250	766	1012	3.20188979	4.09892812	0.92026670
712	948	1.30470936	-0.80635473	4.01548250	767	1013	4.83812836	3.50090257	0.00000000
713	949	1.93659770	0.21606210	4.01548250	768	1014	4.16951547	3.50090257	-0.92026670
714	950	1.81591777	-1.82877155	3.64406785	769	1015	3.50090257	3.50090257	-1.84053340
715	951	2.44780612	-0.80635473	3.64406785	770	1016	2.83228968	3.50090257	-2.76080010

Table 8: MIF1739 contains C_n , such that $C_n^* = \min(C_n)$ $n = 2, \dots, 1000$ (cont.)

#	i_p	X	Y	Z	#	i_p	X	Y	Z
771	1017	2.16367678	3.50090257	-3.68106680	826	1072	2.94650239	1.93525134	-4.24982290
772	1018	1.49506388	3.50090257	-4.60133350	827	1073	2.27788950	1.93525134	-5.17008960
773	1019	0.41322549	3.50090257	-4.24982290	828	1074	1.19605111	1.93525134	-5.52160021
774	1020	-0.66861290	3.50090257	-3.89831230	829	1075	0.11421272	1.93525134	-5.17008960
775	1021	-1.75045129	3.50090257	-3.54680170	830	1076	-0.96762567	1.93525134	-4.81857900
776	1022	-2.83228968	3.50090257	-3.19529110	831	1077	-2.04946406	1.93525134	-4.46706840
777	1023	-3.91412807	3.50090257	-2.84378050	832	1078	-3.13130245	1.93525134	-4.11555780
778	1024	-3.91412807	3.50090257	-1.70626830	833	1079	-4.21314084	1.93525134	-3.76404720
779	1025	-3.91412807	3.50090257	-0.56875610	834	1080	-4.88175374	1.93525134	-2.84378050
780	1026	-3.91412807	3.50090257	0.56875610	835	1081	-4.88175374	1.93525134	-1.70626830
781	1027	-3.91412807	3.50090257	1.70626830	836	1082	-4.88175374	1.93525134	-0.56875610
782	1028	-3.91412807	3.50090257	2.84378050	837	1083	-4.88175374	1.93525134	0.56875610
783	1029	-2.83228968	3.50090257	3.19529110	838	1084	-4.88175374	1.93525134	1.70626830
784	1030	-1.75045129	3.50090257	3.54680170	839	1085	-4.88175374	1.93525134	2.84378050
785	1031	-0.66861290	3.50090257	3.89831230	840	1086	-4.21314084	1.93525134	3.76404720
786	1032	0.41322549	3.50090257	4.24982290	841	1087	-3.13130245	1.93525134	4.11555780
787	1033	1.49506388	3.50090257	4.60133350	842	1088	-2.04946406	1.93525134	4.46706840
788	1034	2.16367678	3.50090257	3.68106680	843	1089	-0.96762567	1.93525134	4.81857900
789	1035	2.83228968	3.50090257	2.76080010	844	1090	0.11421272	1.93525134	5.17008960
790	1036	3.50090257	3.50090257	1.84053340	845	1091	1.19605111	1.93525134	5.52160021
791	1037	4.16951547	3.50090257	0.92026670	846	1092	2.27788950	1.93525134	5.17008960
792	1038	5.80575403	2.90287702	0.00000000	847	1093	2.94650239	1.93525134	4.24982290
793	1039	5.13714114	2.90287702	-0.92026670	848	1094	3.61511529	1.93525134	3.32955620
794	1040	4.46852824	2.90287702	-1.84053340	849	1095	4.28372818	1.93525134	2.40928950
795	1041	3.79991535	2.90287702	-2.76080010	850	1096	4.95234108	1.93525134	1.48902280
796	1042	3.13130245	2.90287702	-3.68106680	851	1097	5.62095397	1.93525134	0.56875610
797	1043	2.46268956	2.90287702	-4.60133350	852	1098	5.43615392	0.96762567	-1.13751220
798	1044	1.79407666	2.90287702	-5.52160021	853	1099	4.76754102	0.96762567	-2.05777890
799	1045	0.71223827	2.90287702	-5.17008960	854	1100	4.09892812	0.96762567	-2.97804560
800	1046	-0.36960012	2.90287702	-4.81857900	855	1101	3.43031523	0.96762567	-3.89831230
801	1047	-1.45143851	2.90287702	-4.46706840	856	1102	2.76170233	0.96762567	-4.81857900
802	1048	-2.53327690	2.90287702	-4.11555780	857	1103	1.67986394	0.96762567	-5.17008960
803	1049	-3.61511529	2.90287702	-3.76404720	858	1104	0.59802555	0.96762567	-5.52160021
804	1050	-4.69695368	2.90287702	-3.41253660	859	1105	-0.48381284	0.96762567	-5.17008960
805	1051	-4.69695368	2.90287702	-2.27502440	860	1106	-1.56565123	0.96762567	-4.81857900
806	1052	-4.69695368	2.90287702	-1.13751220	861	1107	-2.64748962	0.96762567	-4.46706840
807	1053	-4.69695368	2.90287702	0.00000000	862	1108	-3.72932801	0.96762567	-4.11555780
808	1054	-4.69695368	2.90287702	1.13751220	863	1109	-4.39794090	0.96762567	-3.19529110
809	1055	-4.69695368	2.90287702	2.27502440	864	1110	-5.06655380	0.96762567	-2.27502440
810	1056	-4.69695368	2.90287702	3.41253660	865	1111	-5.06655380	0.96762567	-1.13751220
811	1057	-3.61511529	2.90287702	3.76404720	866	1112	-5.06655380	0.96762567	0.00000000
812	1058	-2.53327690	2.90287702	4.11555780	867	1113	-5.06655380	0.96762567	1.13751220
813	1059	-1.45143851	2.90287702	4.46706840	868	1114	-5.06655380	0.96762567	2.27502440
814	1060	-0.36960012	2.90287702	4.81857900	869	1115	-4.39794090	0.96762567	3.19529110
815	1061	0.71223827	2.90287702	5.17008960	870	1116	-3.72932801	0.96762567	4.11555780
816	1062	1.79407666	2.90287702	5.52160021	871	1117	-2.64748962	0.96762567	4.46706840
817	1063	2.46268956	2.90287702	4.60133350	872	1118	-1.56565123	0.96762567	4.81857900
818	1064	3.13130245	2.90287702	3.68106680	873	1119	-0.48381284	0.96762567	5.17008960
819	1065	3.79991535	2.90287702	2.76080010	874	1120	0.59802555	0.96762567	5.52160021
820	1066	4.46852824	2.90287702	1.84053340	875	1121	1.67986394	0.96762567	5.17008960
821	1067	5.13714114	2.90287702	0.92026670	876	1122	2.76170233	0.96762567	4.81857900
822	1068	5.62095397	1.93525134	-0.56875610	877	1123	3.43031523	0.96762567	3.89831230
823	1069	4.95234108	1.93525134	-1.48902280	878	1124	4.09892812	0.96762567	2.97804560
824	1070	4.28372818	1.93525134	-2.40928950	879	1125	4.76754102	0.96762567	2.05777890
825	1071	3.61511529	1.93525134	-3.32955620	880	1126	5.43615392	0.96762567	1.13751220

Table 9: MIF1739 contains C_n , such that $C_n^* = \min(C_n)$ $n = 2, \dots, 1000$ (cont.)

#	i_p	X	Y	Z	#	i_p	X	Y	Z
881	1127	5.43615392	0.96762567	0.00000000	936	1182	3.72932801	-0.96762567	4.11555780
882	1128	5.25135386	0.00000000	-1.70626830	937	1183	4.39794090	-0.96762567	3.19529110
883	1129	4.58274096	0.00000000	-2.62653500	938	1184	5.06655380	-0.96762567	2.27502440
884	1130	3.91412807	0.00000000	-3.54680170	939	1185	5.06655380	-0.96762567	1.13751220
885	1131	3.24551517	0.00000000	-4.46706840	940	1186	5.06655380	-0.96762567	0.00000000
886	1132	2.16367678	0.00000000	-4.81857900	941	1187	5.06655380	-0.96762567	-1.13751220
887	1133	1.08183839	0.00000000	-5.17008960	942	1188	4.88175374	-1.93525134	-2.84378050
888	1134	0.00000000	0.00000000	-5.52160021	943	1189	4.21314084	-1.93525134	-3.76404720
889	1135	-1.08183839	0.00000000	-5.17008960	944	1190	3.13130245	-1.93525134	-4.11555780
890	1136	-2.16367678	0.00000000	-4.81857900	945	1191	2.04946406	-1.93525134	-4.46706840
891	1137	-3.24551517	0.00000000	-4.46706840	946	1192	0.96762567	-1.93525134	-4.81857900
892	1138	-3.91412807	0.00000000	-3.54680170	947	1193	-0.11421272	-1.93525134	-5.17008960
893	1139	-4.58274096	0.00000000	-2.62653500	948	1194	-1.19605111	-1.93525134	-5.52160021
894	1140	-5.25135386	0.00000000	-1.70626830	949	1195	-2.27788950	-1.93525134	-5.17008960
895	1141	-5.25135386	0.00000000	-0.56875610	950	1196	-2.94650239	-1.93525134	-4.24982290
896	1142	-5.25135386	0.00000000	0.56875610	951	1197	-3.61511529	-1.93525134	-3.32955620
897	1143	-5.25135386	0.00000000	1.70626830	952	1198	-4.28372818	-1.93525134	-2.40928950
898	1144	-4.58274096	0.00000000	2.62653500	953	1199	-4.95234108	-1.93525134	-1.48902280
899	1145	-3.91412807	0.00000000	3.54680170	954	1200	-5.62095397	-1.93525134	-0.56875610
900	1146	-3.24551517	0.00000000	4.46706840	955	1201	-5.62095397	-1.93525134	0.56875610
901	1147	-2.16367678	0.00000000	4.81857900	956	1202	-4.95234108	-1.93525134	1.48902280
902	1148	-1.08183839	0.00000000	5.17008960	957	1203	-4.28372818	-1.93525134	2.40928950
903	1149	0.00000000	0.00000000	5.52160021	958	1204	-3.61511529	-1.93525134	3.32955620
904	1150	1.08183839	0.00000000	5.17008960	959	1205	-2.94650239	-1.93525134	4.24982290
905	1151	2.16367678	0.00000000	4.81857900	960	1206	-2.27788950	-1.93525134	5.17008960
906	1152	3.24551517	0.00000000	4.46706840	961	1207	-1.19605111	-1.93525134	5.52160021
907	1153	3.91412807	0.00000000	3.54680170	962	1208	-0.11421272	-1.93525134	5.17008960
908	1154	4.58274096	0.00000000	2.62653500	963	1209	0.96762567	-1.93525134	4.81857900
909	1155	5.25135386	0.00000000	1.70626830	964	1210	2.04946406	-1.93525134	4.46706840
910	1156	5.25135386	0.00000000	0.56875610	965	1211	3.13130245	-1.93525134	4.11555780
911	1157	5.25135386	0.00000000	-0.56875610	966	1212	4.21314084	-1.93525134	3.76404720
912	1158	5.06655380	-0.96762567	-2.27502440	967	1213	4.88175374	-1.93525134	2.84378050
913	1159	4.39794090	-0.96762567	-3.19529110	968	1214	4.88175374	-1.93525134	1.70626830
914	1160	3.72932801	-0.96762567	-4.11555780	969	1215	4.88175374	-1.93525134	0.56875610
915	1161	2.64748962	-0.96762567	-4.46706840	970	1216	4.88175374	-1.93525134	-0.56875610
916	1162	1.56565123	-0.96762567	-4.81857900	971	1217	4.88175374	-1.93525134	-1.70626830
917	1163	0.48381284	-0.96762567	-5.17008960	972	1218	4.69695368	-2.90287702	-3.41253660
918	1164	-0.59802555	-0.96762567	-5.52160021	973	1219	3.61511529	-2.90287702	-3.76404720
919	1165	-1.67986394	-0.96762567	-5.17008960	974	1220	2.53327690	-2.90287702	-4.11555780
920	1166	-2.76170233	-0.96762567	-4.81857900	975	1221	1.45143851	-2.90287702	-4.46706840
921	1167	-3.43031523	-0.96762567	-3.89831230	976	1222	0.36960012	-2.90287702	-4.81857900
922	1168	-4.09892812	-0.96762567	-2.97804560	977	1223	-0.71223827	-2.90287702	-5.17008960
923	1169	-4.76754102	-0.96762567	-2.05777890	978	1224	-1.79407666	-2.90287702	-5.52160021
924	1170	-5.43615392	-0.96762567	-1.13751220	979	1225	-2.46268956	-2.90287702	-4.60133350
925	1171	-5.43615392	-0.96762567	0.00000000	980	1226	-3.13130245	-2.90287702	-3.68106680
926	1172	-5.43615392	-0.96762567	1.13751220	981	1227	-3.79991535	-2.90287702	-2.76080010
927	1173	-4.76754102	-0.96762567	2.05777890	982	1228	-4.46852824	-2.90287702	-1.84053340
928	1174	-4.09892812	-0.96762567	2.97804560	983	1229	-5.13714114	-2.90287702	-0.92026670
929	1175	-3.43031523	-0.96762567	3.89831230	984	1230	-5.80575403	-2.90287702	0.00000000
930	1176	-2.76170233	-0.96762567	4.81857900	985	1231	-5.13714114	-2.90287702	0.92026670
931	1177	-1.67986394	-0.96762567	5.17008960	986	1232	-4.46852824	-2.90287702	1.84053340
932	1178	-0.59802555	-0.96762567	5.52160021	987	1233	-3.79991535	-2.90287702	2.76080010
933	1179	0.48381284	-0.96762567	5.17008960	988	1234	-3.13130245	-2.90287702	3.68106680
934	1180	1.56565123	-0.96762567	4.81857900	989	1235	-2.46268956	-2.90287702	4.60133350
935	1181	2.64748962	-0.96762567	4.46706840	990	1236	-1.79407666	-2.90287702	5.52160021

Table 10: MIF1739 contains C_n , such that $C_n^* = \min(C_n)$ $n = 2, \dots, 1000$ (cont.)

#	i_p	X	Y	Z	#	i_p	X	Y	Z
991	1237	-0.71223827	-2.90287702	5.17008960	1046	1292	3.13130245	-4.09892812	-1.13751220
992	1238	0.36960012	-2.90287702	4.81857900	1047	1293	2.34847684	-4.69695368	-1.70626830
993	1239	1.45143851	-2.90287702	4.46706840	1048	1294	1.26663845	-4.69695368	-2.05777890
994	1240	2.53327690	-2.90287702	4.11555780	1049	1295	0.18480006	-4.69695368	-2.40928950
995	1241	3.61511529	-2.90287702	3.76404720	1050	1296	-0.89703833	-4.69695368	-2.76080010
996	1242	4.69695368	-2.90287702	3.41253660	1051	1297	-1.56565123	-4.69695368	-1.84053340
997	1243	4.69695368	-2.90287702	2.27502440	1052	1298	-2.23426412	-4.69695368	-0.92026670
998	1244	4.69695368	-2.90287702	1.13751220	1053	1299	-2.90287702	-4.69695368	0.00000000
999	1245	4.69695368	-2.90287702	0.00000000	1054	1300	-2.23426412	-4.69695368	0.92026670
1000	1246	4.69695368	-2.90287702	-1.13751220	1055	1301	-1.56565123	-4.69695368	1.84053340
1001	1247	4.69695368	-2.90287702	-2.27502440	1056	1302	-0.89703833	-4.69695368	2.76080010
1002	1248	3.91412807	-3.50090257	-2.84378050	1057	1303	0.18480006	-4.69695368	2.40928950
1003	1249	2.83228968	-3.50090257	-3.19529110	1058	1304	1.26663845	-4.69695368	2.05777890
1004	1250	1.75045129	-3.50090257	-3.54680170	1059	1305	2.34847684	-4.69695368	1.70626830
1005	1251	0.66861290	-3.50090257	-3.89831230	1060	1306	2.34847684	-4.69695368	0.56875610
1006	1252	-0.41322549	-3.50090257	-4.24982290	1061	1307	2.34847684	-4.69695368	-0.56875610
1007	1253	-1.49506388	-3.50090257	-4.60133350	1062	1308	1.56565123	-5.29497923	-1.13751220
1008	1254	-2.16367678	-3.50090257	-3.68106680	1063	1309	0.48381284	-5.29497923	-1.48902280
1009	1255	-2.83228968	-3.50090257	-2.76080010	1064	1310	-0.59802555	-5.29497923	-1.84053340
1010	1256	-3.50090257	-3.50090257	-1.84053340	1065	1311	-1.26663845	-5.29497923	-0.92026670
1011	1257	-4.16951547	-3.50090257	-0.92026670	1066	1312	-1.93525134	-5.29497923	0.00000000
1012	1258	-4.83812836	-3.50090257	0.00000000	1067	1313	-1.26663845	-5.29497923	0.92026670
1013	1259	-4.16951547	-3.50090257	0.92026670	1068	1314	-0.59802555	-5.29497923	1.84053340
1014	1260	-3.50090257	-3.50090257	1.84053340	1069	1315	0.48381284	-5.29497923	1.48902280
1015	1261	-2.83228968	-3.50090257	2.76080010	1070	1316	1.56565123	-5.29497923	1.13751220
1016	1262	-2.16367678	-3.50090257	3.68106680	1071	1317	1.56565123	-5.29497923	0.00000000
1017	1263	-1.49506388	-3.50090257	4.60133350	1072	1318	0.78282561	-5.89300479	-0.56875610
1018	1264	-0.41322549	-3.50090257	4.24982290	1073	1319	-0.29901278	-5.89300479	-0.92026670
1019	1265	0.66861290	-3.50090257	3.89831230	1074	1320	-0.96762567	-5.89300479	0.00000000
1020	1266	1.75045129	-3.50090257	3.54680170	1075	1321	-0.29901278	-5.89300479	0.92026670
1021	1267	2.83228968	-3.50090257	3.19529110	1076	1322	0.78282561	-5.89300479	0.56875610
1022	1268	3.91412807	-3.50090257	2.84378050	1077	1323	0.00000000	-6.49103034	0.00000000
1023	1269	3.91412807	-3.50090257	1.70626830	1078	1492	-1.70445005	-5.89026788	-3.44600888
1024	1270	3.91412807	-3.50090257	0.56875610	1079	1493	-1.39145969	-4.51624861	-2.48272359
1025	1271	3.91412807	-3.50090257	-0.56875610	1080	1494	-1.07846932	-5.14222933	-1.51943831
1026	1272	3.91412807	-3.50090257	-1.70626830	1081	1495	-2.71730814	-3.26428716	-3.44600888
1027	1273	3.13130245	-4.09892812	-2.27502440	1082	1496	-2.40431778	-3.89026788	-2.48272359
1028	1274	2.04946406	-4.09892812	-2.62653500	1083	1497	-2.09132741	-4.51624861	-1.51943831
1029	1275	0.96762567	-4.09892812	-2.97804560	1084	1498	-1.77833705	-5.14222933	-0.55615302
1030	1276	-0.11421272	-4.09892812	-3.32955620	1085	1499	-3.41717587	-3.26428716	-2.48272359
1031	1277	-1.19605111	-4.09892812	-3.68106680	1086	1500	-3.10418550	-3.89026788	-1.51943831
1032	1278	-1.86466400	-4.09892812	-2.76080010	1087	1501	-2.79119514	-4.51624861	-0.55615302
1033	1279	-2.53327690	-4.09892812	-1.84053340	1088	1502	-4.11704359	-3.26428716	-1.51943831
1034	1280	-3.20188979	-4.09892812	-0.92026670	1089	1503	-3.80405323	-3.89026788	-0.55615302
1035	1281	-3.87050269	-4.09892812	0.00000000	1090	1586	4.39669693	1.30524504	2.45850282
1036	1282	-3.20188979	-4.09892812	0.92026670	1091	1587	3.69682920	1.30524504	3.42178811
1037	1283	-2.53327690	-4.09892812	1.84053340	1092	1590	4.20325825	0.29238695	3.05384587
1038	1284	-1.86466400	-4.09892812	2.76080010	1093	1624	0.00000000	7.57286873	0.00000000
1039	1285	-1.19605111	-4.09892812	3.68106680	1094	1625	0.96762567	6.97484318	0.00000000
1040	1286	-0.11421272	-4.09892812	3.32955620	1095	1626	0.29901278	6.97484318	-0.92026670
1041	1287	0.96762567	-4.09892812	2.97804560	1096	1627	-0.78282561	6.97484318	-0.56875610
1042	1288	2.04946406	-4.09892812	2.62653500	1097	1628	-0.78282561	6.97484318	0.56875610
1043	1289	3.13130245	-4.09892812	2.27502440	1098	1629	0.29901278	6.97484318	0.92026670
1044	1290	3.13130245	-4.09892812	1.13751220	1099	1630	1.93525134	6.37681762	0.00000000
1045	1291	3.13130245	-4.09892812	0.00000000	1100	1631	1.26663845	6.37681762	-0.92026670

Table 11: MIF1739 contains C_n , such that $C_n^* = \min(C_n)$ $n = 2, \dots, 1000$ (cont.)

#	i_p	X	Y	Z	#	i_p	X	Y	Z
1101	1632	0.59802555	6.37681762	-1.84053340	1156	1687	-3.91412807	4.58274096	-0.56875610
1102	1633	-0.48381284	6.37681762	-1.48902280	1157	1688	-3.91412807	4.58274096	0.56875610
1103	1634	-1.56565123	6.37681762	-1.13751220	1158	1689	-3.91412807	4.58274096	1.70626830
1104	1635	-1.56565123	6.37681762	0.00000000	1159	1690	-3.91412807	4.58274096	2.84378050
1105	1636	-1.56565123	6.37681762	1.13751220	1160	1691	-2.83228968	4.58274096	3.19529110
1106	1637	-0.48381284	6.37681762	1.48902280	1161	1692	-1.75045129	4.58274096	3.54680170
1107	1638	0.59802555	6.37681762	1.84053340	1162	1693	-0.66861290	4.58274096	3.89831230
1108	1639	1.26663845	6.37681762	0.92026670	1163	1694	0.41322549	4.58274096	4.24982290
1109	1640	2.90287702	5.77879207	0.00000000	1164	1695	1.49506388	4.58274096	4.60133350
1110	1641	2.23426412	5.77879207	-0.92026670	1165	1696	2.16367678	4.58274096	3.68106680
1111	1642	1.56565123	5.77879207	-1.84053340	1166	1697	2.83228968	4.58274096	2.76080010
1112	1643	0.89703833	5.77879207	-2.76080010	1167	1698	3.50090257	4.58274096	1.84053340
1113	1644	-0.18480006	5.77879207	-2.40928950	1168	1699	4.16951547	4.58274096	0.92026670
1114	1645	-1.26663845	5.77879207	-2.05777890	1169	1701	5.13714114	3.98471541	-0.92026670
1115	1646	-2.34847684	5.77879207	-1.70626830	1170	1702	4.46852824	3.98471541	-1.84053340
1116	1647	-2.34847684	5.77879207	-0.56875610	1171	1703	3.79991535	3.98471541	-2.76080010
1117	1648	-2.34847684	5.77879207	0.56875610	1172	1704	3.13130245	3.98471541	-3.68106680
1118	1649	-2.34847684	5.77879207	1.70626830	1173	1705	2.46268956	3.98471541	-4.60133350
1119	1650	-1.26663845	5.77879207	2.05777890	1174	1707	0.71223827	3.98471541	-5.17008960
1120	1651	-0.18480006	5.77879207	2.40928950	1175	1708	-0.36960012	3.98471541	-4.81857900
1121	1652	0.89703833	5.77879207	2.76080010	1176	1709	-1.45143851	3.98471541	-4.46706840
1122	1653	1.56565123	5.77879207	1.84053340	1177	1710	-2.53327690	3.98471541	-4.11555780
1123	1654	2.23426412	5.77879207	0.92026670	1178	1711	-3.61511529	3.98471541	-3.76404720
1124	1655	3.87050269	5.18076651	0.00000000	1179	1713	-4.69695368	3.98471541	-2.27502440
1125	1656	3.20188979	5.18076651	-0.92026670	1180	1714	-4.69695368	3.98471541	-1.13751220
1126	1657	2.53327690	5.18076651	-1.84053340	1181	1715	-4.69695368	3.98471541	0.00000000
1127	1658	1.86466400	5.18076651	-2.76080010	1182	1716	-4.69695368	3.98471541	1.13751220
1128	1659	1.19605111	5.18076651	-3.68106680	1183	1717	-4.69695368	3.98471541	2.27502440
1129	1660	0.11421272	5.18076651	-3.32955620	1184	1718	-4.69695368	3.98471541	3.41253660
1130	1661	-0.96762567	5.18076651	-2.97804560	1185	1719	-3.61511529	3.98471541	3.76404720
1131	1662	-2.04946406	5.18076651	-2.62653500	1186	1720	-2.53327690	3.98471541	4.11555780
1132	1663	-3.13130245	5.18076651	-2.27502440	1187	1721	-1.45143851	3.98471541	4.46706840
1133	1664	-3.13130245	5.18076651	-1.13751220	1188	1722	-0.36960012	3.98471541	4.81857900
1134	1665	-3.13130245	5.18076651	0.00000000	1189	1723	0.71223827	3.98471541	5.17008960
1135	1666	-3.13130245	5.18076651	1.13751220	1190	1724	1.79407666	3.98471541	5.52160021
1136	1667	-3.13130245	5.18076651	2.27502440	1191	1725	2.46268956	3.98471541	4.60133350
1137	1668	-2.04946406	5.18076651	2.62653500	1192	1726	3.13130245	3.98471541	3.68106680
1138	1669	-0.96762567	5.18076651	2.97804560	1193	1727	3.79991535	3.98471541	2.76080010
1139	1670	0.11421272	5.18076651	3.32955620	1194	1728	4.46852824	3.98471541	1.84053340
1140	1671	1.19605111	5.18076651	3.68106680	1195	1729	5.13714114	3.98471541	0.92026670
1141	1672	1.86466400	5.18076651	2.76080010	1196	1746	-5.47977929	3.38668985	-1.70626830
1142	1673	2.53327690	5.18076651	1.84053340	1197	1747	-5.47977929	3.38668985	-0.56875610
1143	1674	3.20188979	5.18076651	0.92026670	1198	1748	-5.47977929	3.38668985	0.56875610
1144	1675	4.83812836	4.58274096	0.00000000	1199	1749	-5.47977929	3.38668985	1.70626830
1145	1676	4.16951547	4.58274096	-0.92026670	1200	1753	-3.31610251	3.38668985	4.68431390
1146	1677	3.50090257	4.58274096	-1.84053340	1201	1754	-2.23426412	3.38668985	5.03582450
1147	1678	2.83228968	4.58274096	-2.76080010	1202	1755	-1.15242573	3.38668985	5.38733510
1148	1679	2.16367678	4.58274096	-3.68106680	1203	1756	-0.07058734	3.38668985	5.73884570
1149	1680	1.49506388	4.58274096	-4.60133350	1204	1760	3.43031523	3.38668985	4.60133350
1150	1681	0.41322549	4.58274096	-4.24982290	1205	1761	4.09892812	3.38668985	3.68106680
1151	1682	-0.66861290	4.58274096	-3.89831230	1206	1762	4.76754102	3.38668985	2.76080010
1152	1683	-1.75045129	4.58274096	-3.54680170	1207	1763	5.43615392	3.38668985	1.84053340
1153	1684	-2.83228968	4.58274096	-3.19529110	1208	1780	-5.66457935	2.41906418	-2.27502440
1154	1685	-3.91412807	4.58274096	-2.84378050	1209	1781	-5.66457935	2.41906418	-1.13751220
1155	1686	-3.91412807	4.58274096	-1.70626830	1210	1782	-5.66457935	2.41906418	0.00000000

Table 12: MIF1739 contains C_n , such that $C_n^* = \min(C_n)$ $n = 2, \dots, 1000$ (cont.)

#	i_p	X	Y	Z	#	i_p	X	Y	Z
1211	1783	-5.66457935	2.41906418	1.13751220	1266	2086	1.26663845	-5.77879207	-2.05777890
1212	1784	-5.66457935	2.41906418	2.27502440	1267	2087	0.18480006	-5.77879207	-2.40928950
1213	1815	-5.84937941	1.45143851	-1.70626830	1268	2098	2.34847684	-5.77879207	0.56875610
1214	1816	-5.84937941	1.45143851	-0.56875610	1269	2099	2.34847684	-5.77879207	-0.56875610
1215	1817	-5.84937941	1.45143851	0.56875610	1270	2100	1.56565123	-6.37681762	-1.13751220
1216	1818	-5.84937941	1.45143851	1.70626830	1271	2101	0.48381284	-6.37681762	-1.48902280
1217	1840	2.46268956	0.48381284	-5.73884570	1272	2109	1.56565123	-6.37681762	0.00000000
1218	1841	1.38085117	0.48381284	-6.09035631	1273	2536	0.00000000	8.65470712	0.00000000
1219	1850	-6.03417947	0.48381284	-1.13751220	1274	2537	0.96762567	8.05668157	0.00000000
1220	1851	-6.03417947	0.48381284	0.00000000	1275	2538	0.29901278	8.05668157	-0.92026670
1221	1852	-6.03417947	0.48381284	1.13751220	1276	2539	-0.78282561	8.05668157	-0.56875610
1222	1874	2.94650239	-0.48381284	-5.38733510	1277	2540	-0.78282561	8.05668157	0.56875610
1223	1875	1.86466400	-0.48381284	-5.73884570	1278	2541	0.29901278	8.05668157	0.92026670
1224	1876	0.78282561	-0.48381284	-6.09035631	1279	2542	1.93525134	7.45865601	0.00000000
1225	1885	-6.21897953	-0.48381284	-0.56875610	1280	2543	1.26663845	7.45865601	-0.92026670
1226	1886	-6.21897953	-0.48381284	0.56875610	1281	2544	0.59802555	7.45865601	-1.84053340
1227	1908	3.43031523	-1.45143851	-5.03582450	1282	2545	-0.48381284	7.45865601	-1.48902280
1228	1909	2.34847684	-1.45143851	-5.38733510	1283	2546	-1.56565123	7.45865601	-1.13751220
1229	1910	1.26663845	-1.45143851	-5.73884570	1284	2547	-1.56565123	7.45865601	0.00000000
1230	1911	0.18480006	-1.45143851	-6.09035631	1285	2548	-1.56565123	7.45865601	1.13751220
1231	1942	3.91412807	-2.41906418	-4.68431390	1286	2549	-0.48381284	7.45865601	1.48902280
1232	1943	2.83228968	-2.41906418	-5.03582450	1287	2550	0.59802555	7.45865601	1.84053340
1233	1944	1.75045129	-2.41906418	-5.38733510	1288	2551	1.26663845	7.45865601	0.92026670
1234	1945	0.66861290	-2.41906418	-5.73884570	1289	2552	2.90287702	6.86063046	0.00000000
1235	1946	-0.41322549	-2.41906418	-6.09035631	1290	2553	2.23426412	6.86063046	-0.92026670
1236	1977	3.31610251	-3.38668985	-4.68431390	1291	2554	1.56565123	6.86063046	-1.84053340
1237	1978	2.23426412	-3.38668985	-5.03582450	1292	2555	0.89703833	6.86063046	-2.76080010
1238	1979	1.15242573	-3.38668985	-5.38733510	1293	2556	-0.18480006	6.86063046	-2.40928950
1239	1980	0.07058734	-3.38668985	-5.73884570	1294	2557	-1.26663845	6.86063046	-2.05777890
1240	2011	3.61511529	-3.98471541	-3.76404720	1295	2558	-2.34847684	6.86063046	-1.70626830
1241	2012	2.53327690	-3.98471541	-4.11555780	1296	2559	-2.34847684	6.86063046	-0.56875610
1242	2013	1.45143851	-3.98471541	-4.46706840	1297	2560	-2.34847684	6.86063046	0.56875610
1243	2014	0.36960012	-3.98471541	-4.81857900	1298	2561	-2.34847684	6.86063046	1.70626830
1244	2015	-0.71223827	-3.98471541	-5.17008960	1299	2562	-1.26663845	6.86063046	2.05777890
1245	2036	4.69695368	-3.98471541	1.13751220	1300	2563	-0.18480006	6.86063046	2.40928950
1246	2037	4.69695368	-3.98471541	0.00000000	1301	2564	0.89703833	6.86063046	2.76080010
1247	2038	4.69695368	-3.98471541	-1.13751220	1302	2565	1.56565123	6.86063046	1.84053340
1248	2039	4.69695368	-3.98471541	-2.27502440	1303	2566	2.23426412	6.86063046	0.92026670
1249	2040	3.91412807	-4.58274096	-2.84378050	1304	2567	3.87050269	6.26260490	0.00000000
1250	2041	2.83228968	-4.58274096	-3.19529110	1305	2568	3.20188979	6.26260490	-0.92026670
1251	2042	1.75045129	-4.58274096	-3.54680170	1306	2569	2.53327690	6.26260490	-1.84053340
1252	2043	0.66861290	-4.58274096	-3.89831230	1307	2570	1.86466400	6.26260490	-2.76080010
1253	2044	-0.41322549	-4.58274096	-4.24982290	1308	2571	1.19605111	6.26260490	-3.68106680
1254	2061	3.91412807	-4.58274096	1.70626830	1309	2572	0.11421272	6.26260490	-3.32955620
1255	2062	3.91412807	-4.58274096	0.56875610	1310	2573	-0.96762567	6.26260490	-2.97804560
1256	2063	3.91412807	-4.58274096	-0.56875610	1311	2574	-2.04946406	6.26260490	-2.62653500
1257	2064	3.91412807	-4.58274096	-1.70626830	1312	2575	-3.13130245	6.26260490	-2.27502440
1258	2065	3.13130245	-5.18076651	-2.27502440	1313	2576	-3.13130245	6.26260490	-1.13751220
1259	2066	2.04946406	-5.18076651	-2.62653500	1314	2577	-3.13130245	6.26260490	0.00000000
1260	2067	0.96762567	-5.18076651	-2.97804560	1315	2578	-3.13130245	6.26260490	1.13751220
1261	2068	-0.11421272	-5.18076651	-3.32955620	1316	2579	-3.13130245	6.26260490	2.27502440
1262	2082	3.13130245	-5.18076651	1.13751220	1317	2580	-2.04946406	6.26260490	2.62653500
1263	2083	3.13130245	-5.18076651	0.00000000	1318	2581	-0.96762567	6.26260490	2.97804560
1264	2084	3.13130245	-5.18076651	-1.13751220	1319	2582	0.11421272	6.26260490	3.32955620
1265	2085	2.34847684	-5.77879207	-1.70626830	1320	2583	1.19605111	6.26260490	3.68106680

Table 13: MIF1739 contains C_n , such that $C_n^* = \min(C_n)$ $n = 2, \dots, 1000$ (cont.)

#	i_p	X	Y	Z	#	i_p	X	Y	Z
1321	2584	1.86466400	6.26260490	2.76080010	1376	2658	-5.47977929	4.46852824	-1.70626830
1322	2585	2.53327690	6.26260490	1.84053340	1377	2659	-5.47977929	4.46852824	-0.56875610
1323	2586	3.20188979	6.26260490	0.92026670	1378	2660	-5.47977929	4.46852824	0.56875610
1324	2587	4.83812836	5.66457935	0.00000000	1379	2661	-5.47977929	4.46852824	1.70626830
1325	2588	4.16951547	5.66457935	-0.92026670	1380	2662	-5.47977929	4.46852824	2.84378050
1326	2589	3.50090257	5.66457935	-1.84053340	1381	2664	-4.39794090	4.46852824	4.33280330
1327	2590	2.83228968	5.66457935	-2.76080010	1382	2665	-3.31610251	4.46852824	4.68431390
1328	2591	2.16367678	5.66457935	-3.68106680	1383	2666	-2.23426412	4.46852824	5.03582450
1329	2592	1.49506388	5.66457935	-4.60133350	1384	2667	-1.15242573	4.46852824	5.38733510
1330	2593	0.41322549	5.66457935	-4.24982290	1385	2668	-0.07058734	4.46852824	5.73884570
1331	2594	-0.66861290	5.66457935	-3.89831230	1386	2669	1.01125105	4.46852824	6.09035631
1332	2595	-1.75045129	5.66457935	-3.54680170	1387	2671	2.76170233	4.46852824	5.52160021
1333	2596	-2.83228968	5.66457935	-3.19529110	1388	2672	3.43031523	4.46852824	4.60133350
1334	2597	-3.91412807	5.66457935	-2.84378050	1389	2673	4.09892812	4.46852824	3.68106680
1335	2598	-3.91412807	5.66457935	-1.70626830	1390	2674	4.76754102	4.46852824	2.76080010
1336	2599	-3.91412807	5.66457935	-0.56875610	1391	2675	5.43615392	4.46852824	1.84053340
1337	2600	-3.91412807	5.66457935	0.56875610	1392	3738	0.00000000	9.73654551	0.00000000
1338	2601	-3.91412807	5.66457935	1.70626830	1393	3739	0.96762567	9.13851996	0.00000000
1339	2602	-3.91412807	5.66457935	2.84378050	1394	3740	0.29901278	9.13851996	-0.92026670
1340	2603	-2.83228968	5.66457935	3.19529110	1395	3741	-0.78282561	9.13851996	-0.56875610
1341	2604	-1.75045129	5.66457935	3.54680170	1396	3742	-0.78282561	9.13851996	0.56875610
1342	2605	-0.66861290	5.66457935	3.89831230	1397	3743	0.29901278	9.13851996	0.92026670
1343	2606	0.41322549	5.66457935	4.24982290	1398	3744	1.93525134	8.54049440	0.00000000
1344	2607	1.49506388	5.66457935	4.60133350	1399	3745	1.26663845	8.54049440	-0.92026670
1345	2608	2.16367678	5.66457935	3.68106680	1400	3746	0.59802555	8.54049440	-1.84053340
1346	2609	2.83228968	5.66457935	2.76080010	1401	3747	-0.48381284	8.54049440	-1.48902280
1347	2610	3.50090257	5.66457935	1.84053340	1402	3748	-1.56565123	8.54049440	-1.13751220
1348	2611	4.16951547	5.66457935	0.92026670	1403	3749	-1.56565123	8.54049440	0.00000000
1349	2613	5.13714114	5.06655380	-0.92026670	1404	3750	-1.56565123	8.54049440	1.13751220
1350	2614	4.46852824	5.06655380	-1.84053340	1405	3751	-0.48381284	8.54049440	1.48902280
1351	2615	3.79991535	5.06655380	-2.76080010	1406	3752	0.59802555	8.54049440	1.84053340
1352	2616	3.13130245	5.06655380	-3.68106680	1407	3753	1.26663845	8.54049440	0.92026670
1353	2617	2.46268956	5.06655380	-4.60133350	1408	3754	2.90287702	7.94246885	0.00000000
1354	2619	0.71223827	5.06655380	-5.17008960	1409	3755	2.23426412	7.94246885	-0.92026670
1355	2620	-0.36960012	5.06655380	-4.81857900	1410	3756	1.56565123	7.94246885	-1.84053340
1356	2621	-1.45143851	5.06655380	-4.46706840	1411	3757	0.89703833	7.94246885	-2.76080010
1357	2622	-2.53327690	5.06655380	-4.11555780	1412	3758	-0.18480006	7.94246885	-2.40928950
1358	2623	-3.61511529	5.06655380	-3.76404720	1413	3759	-1.26663845	7.94246885	-2.05777890
1359	2625	-4.69695368	5.06655380	-2.27502440	1414	3760	-2.34847684	7.94246885	-1.70626830
1360	2626	-4.69695368	5.06655380	-1.13751220	1415	3761	-2.34847684	7.94246885	-0.56875610
1361	2627	-4.69695368	5.06655380	0.00000000	1416	3762	-2.34847684	7.94246885	0.56875610
1362	2628	-4.69695368	5.06655380	1.13751220	1417	3763	-2.34847684	7.94246885	1.70626830
1363	2629	-4.69695368	5.06655380	2.27502440	1418	3764	-1.26663845	7.94246885	2.05777890
1364	2630	-4.69695368	5.06655380	3.41253660	1419	3765	-0.18480006	7.94246885	2.40928950
1365	2631	-3.61511529	5.06655380	3.76404720	1420	3766	0.89703833	7.94246885	2.76080010
1366	2632	-2.53327690	5.06655380	4.11555780	1421	3767	1.56565123	7.94246885	1.84053340
1367	2633	-1.45143851	5.06655380	4.46706840	1422	3768	2.23426412	7.94246885	0.92026670
1368	2634	-0.36960012	5.06655380	4.81857900	1423	3769	3.87050269	7.34444329	0.00000000
1369	2635	0.71223827	5.06655380	5.17008960	1424	3770	3.20188979	7.34444329	-0.92026670
1370	2636	1.79407666	5.06655380	5.52160021	1425	3771	2.53327690	7.34444329	-1.84053340
1371	2637	2.46268956	5.06655380	4.60133350	1426	3772	1.86466400	7.34444329	-2.76080010
1372	2638	3.13130245	5.06655380	3.68106680	1427	3773	1.19605111	7.34444329	-3.68106680
1373	2639	3.79991535	5.06655380	2.76080010	1428	3774	0.11421272	7.34444329	-3.32955620
1374	2640	4.46852824	5.06655380	1.84053340	1429	3775	-0.96762567	7.34444329	-2.97804560
1375	2641	5.13714114	5.06655380	0.92026670	1430	3776	-2.04946406	7.34444329	-2.62653500

Table 14: MIF1739 contains C_n , such that $C_n^* = \min(C_n)$ $n = 2, \dots, 1000$ (cont.)

#	i_p	X	Y	Z	#	i_p	X	Y	Z
1431	3777	-3.13130245	7.34444329	-2.27502440	1486	3835	-1.45143851	6.14839219	4.46706840
1432	3778	-3.13130245	7.34444329	-1.13751220	1487	3836	-0.36960012	6.14839219	4.81857900
1433	3779	-3.13130245	7.34444329	0.00000000	1488	3837	0.71223827	6.14839219	5.17008960
1434	3780	-3.13130245	7.34444329	1.13751220	1489	3838	1.79407666	6.14839219	5.52160021
1435	3781	-3.13130245	7.34444329	2.27502440	1490	3839	2.46268956	6.14839219	4.60133350
1436	3782	-2.04946406	7.34444329	2.62653500	1491	3840	3.13130245	6.14839219	3.68106680
1437	3783	-0.96762567	7.34444329	2.97804560	1492	3841	3.79991535	6.14839219	2.76080010
1438	3784	0.11421272	7.34444329	3.32955620	1493	3842	4.46852824	6.14839219	1.84053340
1439	3785	1.19605111	7.34444329	3.68106680	1494	3843	5.13714114	6.14839219	0.92026670
1440	3786	1.86466400	7.34444329	2.76080010	1495	3860	-5.47977929	5.55036663	-1.70626830
1441	3787	2.53327690	7.34444329	1.84053340	1496	3861	-5.47977929	5.55036663	-0.56875610
1442	3788	3.20188979	7.34444329	0.92026670	1497	3862	-5.47977929	5.55036663	0.56875610
1443	3789	4.83812836	6.74641774	0.00000000	1498	3863	-5.47977929	5.55036663	1.70626830
1444	3790	4.16951547	6.74641774	-0.92026670	1499	3864	-5.47977929	5.55036663	2.84378050
1445	3791	3.50090257	6.74641774	-1.84053340	1500	3866	-4.39794090	5.55036663	4.33280330
1446	3792	2.83228968	6.74641774	-2.76080010	1501	3867	-3.31610251	5.55036663	4.68431390
1447	3793	2.16367678	6.74641774	-3.68106680	1502	3868	-2.23426412	5.55036663	5.03582450
1448	3794	1.49506388	6.74641774	-4.60133350	1503	3869	-1.15242573	5.55036663	5.38733510
1449	3795	0.41322549	6.74641774	-4.24982290	1504	3870	-0.07058734	5.55036663	5.73884570
1450	3796	-0.66861290	6.74641774	-3.89831230	1505	3871	1.01125105	5.55036663	6.09035631
1451	3797	-1.75045129	6.74641774	-3.54680170	1506	3873	2.76170233	5.55036663	5.52160021
1452	3798	-2.83228968	6.74641774	-3.19529110	1507	3874	3.43031523	5.55036663	4.60133350
1453	3799	-3.91412807	6.74641774	-2.84378050	1508	3875	4.09892812	5.55036663	3.68106680
1454	3800	-3.91412807	6.74641774	-1.70626830	1509	3876	4.76754102	5.55036663	2.76080010
1455	3801	-3.91412807	6.74641774	-0.56875610	1510	3877	5.43615392	5.55036663	1.84053340
1456	3802	-3.91412807	6.74641774	0.56875610	1511	5270	0.00000000	10.81838390	0.00000000
1457	3803	-3.91412807	6.74641774	1.70626830	1512	5271	0.96762567	10.22035835	0.00000000
1458	3804	-3.91412807	6.74641774	2.84378050	1513	5272	0.29901278	10.22035835	-0.92026670
1459	3805	-2.83228968	6.74641774	3.19529110	1514	5273	-0.78282561	10.22035835	-0.56875610
1460	3806	-1.75045129	6.74641774	3.54680170	1515	5274	-0.78282561	10.22035835	0.56875610
1461	3807	-0.66861290	6.74641774	3.89831230	1516	5275	0.29901278	10.22035835	0.92026670
1462	3808	0.41322549	6.74641774	4.24982290	1517	5276	1.93525134	9.62233279	0.00000000
1463	3809	1.49506388	6.74641774	4.60133350	1518	5277	1.26663845	9.62233279	-0.92026670
1464	3810	2.16367678	6.74641774	3.68106680	1519	5278	0.59802555	9.62233279	-1.84053340
1465	3811	2.83228968	6.74641774	2.76080010	1520	5279	-0.48381284	9.62233279	-1.48902280
1466	3812	3.50090257	6.74641774	1.84053340	1521	5280	-1.56565123	9.62233279	-1.13751220
1467	3813	4.16951547	6.74641774	0.92026670	1522	5281	-1.56565123	9.62233279	0.00000000
1468	3815	5.13714114	6.14839219	-0.92026670	1523	5282	-1.56565123	9.62233279	1.13751220
1469	3816	4.46852824	6.14839219	-1.84053340	1524	5283	-0.48381284	9.62233279	1.48902280
1470	3817	3.79991535	6.14839219	-2.76080010	1525	5284	0.59802555	9.62233279	1.84053340
1471	3818	3.13130245	6.14839219	-3.68106680	1526	5285	1.26663845	9.62233279	0.92026670
1472	3819	2.46268956	6.14839219	-4.60133350	1527	5286	2.90287702	9.02430724	0.00000000
1473	3821	0.71223827	6.14839219	-5.17008960	1528	5287	2.23426412	9.02430724	-0.92026670
1474	3822	-0.36960012	6.14839219	-4.81857900	1529	5288	1.56565123	9.02430724	-1.84053340
1475	3823	-1.45143851	6.14839219	-4.46706840	1530	5289	0.89703833	9.02430724	-2.76080010
1476	3824	-2.53327690	6.14839219	-4.11555780	1531	5290	-0.18480006	9.02430724	-2.40928950
1477	3825	-3.61511529	6.14839219	-3.76404720	1532	5291	-1.26663845	9.02430724	-2.05777890
1478	3827	-4.69695368	6.14839219	-2.27502440	1533	5292	-2.34847684	9.02430724	-1.70626830
1479	3828	-4.69695368	6.14839219	-1.13751220	1534	5293	-2.34847684	9.02430724	-0.56875610
1480	3829	-4.69695368	6.14839219	0.00000000	1535	5294	-2.34847684	9.02430724	0.56875610
1481	3830	-4.69695368	6.14839219	1.13751220	1536	5295	-2.34847684	9.02430724	1.70626830
1482	3831	-4.69695368	6.14839219	2.27502440	1537	5296	-1.26663845	9.02430724	2.05777890
1483	3832	-4.69695368	6.14839219	3.41253660	1538	5297	-0.18480006	9.02430724	2.40928950
1484	3833	-3.61511529	6.14839219	3.76404720	1539	5298	0.89703833	9.02430724	2.76080010
1485	3834	-2.53327690	6.14839219	4.11555780	1540	5299	1.56565123	9.02430724	1.84053340

Table 15: MIF1739 contains C_n , such that $C_n^* = \min(C_n)$ $n = 2, \dots, 1000$ (cont.)

#	i_p	X	Y	Z	#	i_p	X	Y	Z
1541	5300	2.23426412	9.02430724	0.92026670	1596	5357	-3.61511529	7.23023058	-3.76404720
1542	5301	3.87050269	8.42628168	0.00000000	1597	5359	-4.69695368	7.23023058	-2.27502440
1543	5302	3.20188979	8.42628168	-0.92026670	1598	5360	-4.69695368	7.23023058	-1.13751220
1544	5303	2.53327690	8.42628168	-1.84053340	1599	5361	-4.69695368	7.23023058	0.00000000
1545	5304	1.86466400	8.42628168	-2.76080010	1600	5362	-4.69695368	7.23023058	1.13751220
1546	5305	1.19605111	8.42628168	-3.68106680	1601	5363	-4.69695368	7.23023058	2.27502440
1547	5306	0.11421272	8.42628168	-3.32955620	1602	5364	-4.69695368	7.23023058	3.41253660
1548	5307	-0.96762567	8.42628168	-2.97804560	1603	5365	-3.61511529	7.23023058	3.76404720
1549	5308	-2.04946406	8.42628168	-2.62653500	1604	5366	-2.53327690	7.23023058	4.11555780
1550	5309	-3.13130245	8.42628168	-2.27502440	1605	5367	-1.45143851	7.23023058	4.46706840
1551	5310	-3.13130245	8.42628168	-1.13751220	1606	5368	-0.36960012	7.23023058	4.81857900
1552	5311	-3.13130245	8.42628168	0.00000000	1607	5369	0.71223827	7.23023058	5.17008960
1553	5312	-3.13130245	8.42628168	1.13751220	1608	5370	1.79407666	7.23023058	5.52160021
1554	5313	-3.13130245	8.42628168	2.27502440	1609	5371	2.46268956	7.23023058	4.60133350
1555	5314	-2.04946406	8.42628168	2.62653500	1610	5372	3.13130245	7.23023058	3.68106680
1556	5315	-0.96762567	8.42628168	2.97804560	1611	5373	3.79991535	7.23023058	2.76080010
1557	5316	0.11421272	8.42628168	3.32955620	1612	5374	4.46852824	7.23023058	1.84053340
1558	5317	1.19605111	8.42628168	3.68106680	1613	5375	5.13714114	7.23023058	0.92026670
1559	5318	1.86466400	8.42628168	2.76080010	1614	5392	-5.47977929	6.63220502	-1.70626830
1560	5319	2.53327690	8.42628168	1.84053340	1615	5393	-5.47977929	6.63220502	-0.56875610
1561	5320	3.20188979	8.42628168	0.92026670	1616	5394	-5.47977929	6.63220502	0.56875610
1562	5321	4.83812836	7.82825613	0.00000000	1617	5395	-5.47977929	6.63220502	1.70626830
1563	5322	4.16951547	7.82825613	-0.92026670	1618	5396	-5.47977929	6.63220502	2.84378050
1564	5323	3.50090257	7.82825613	-1.84053340	1619	5398	-4.39794090	6.63220502	4.33280330
1565	5324	2.83228968	7.82825613	-2.76080010	1620	5399	-3.31610251	6.63220502	4.68431390
1566	5325	2.16367678	7.82825613	-3.68106680	1621	5400	-2.23426412	6.63220502	5.03582450
1567	5326	1.49506388	7.82825613	-4.60133350	1622	5401	-1.15242573	6.63220502	5.38733510
1568	5327	0.41322549	7.82825613	-4.24982290	1623	5402	-0.07058734	6.63220502	5.73884570
1569	5328	-0.66861290	7.82825613	-3.89831230	1624	5403	1.01125105	6.63220502	6.09035631
1570	5329	-1.75045129	7.82825613	-3.54680170	1625	5405	2.76170233	6.63220502	5.52160021
1571	5330	-2.83228968	7.82825613	-3.19529110	1626	5406	3.43031523	6.63220502	4.60133350
1572	5331	-3.91412807	7.82825613	-2.84378050	1627	5407	4.09892812	6.63220502	3.68106680
1573	5332	-3.91412807	7.82825613	-1.70626830	1628	5408	4.76754102	6.63220502	2.76080010
1574	5333	-3.91412807	7.82825613	-0.56875610	1629	5409	5.43615392	6.63220502	1.84053340
1575	5334	-3.91412807	7.82825613	0.56875610	1630	7172	0.00000000	11.90022229	0.00000000
1576	5335	-3.91412807	7.82825613	1.70626830	1631	7173	0.96762567	11.30219674	0.00000000
1577	5336	-3.91412807	7.82825613	2.84378050	1632	7174	0.29901278	11.30219674	-0.92026670
1578	5337	-2.83228968	7.82825613	3.19529110	1633	7175	-0.78282561	11.30219674	-0.56875610
1579	5338	-1.75045129	7.82825613	3.54680170	1634	7176	-0.78282561	11.30219674	0.56875610
1580	5339	-0.66861290	7.82825613	3.89831230	1635	7177	0.29901278	11.30219674	0.92026670
1581	5340	0.41322549	7.82825613	4.24982290	1636	7178	1.93525134	10.70417118	0.00000000
1582	5341	1.49506388	7.82825613	4.60133350	1637	7179	1.26663845	10.70417118	-0.92026670
1583	5342	2.16367678	7.82825613	3.68106680	1638	7180	0.59802555	10.70417118	-1.84053340
1584	5343	2.83228968	7.82825613	2.76080010	1639	7181	-0.48381284	10.70417118	-1.48902280
1585	5344	3.50090257	7.82825613	1.84053340	1640	7182	-1.56565123	10.70417118	-1.13751220
1586	5345	4.16951547	7.82825613	0.92026670	1641	7183	-1.56565123	10.70417118	0.00000000
1587	5347	5.13714114	7.23023058	-0.92026670	1642	7184	-1.56565123	10.70417118	1.13751220
1588	5348	4.46852824	7.23023058	-1.84053340	1643	7185	-0.48381284	10.70417118	1.48902280
1589	5349	3.79991535	7.23023058	-2.76080010	1644	7186	0.59802555	10.70417118	1.84053340
1590	5350	3.13130245	7.23023058	-3.68106680	1645	7187	1.26663845	10.70417118	0.92026670
1591	5351	2.46268956	7.23023058	-4.60133350	1646	7188	2.90287702	10.10614563	0.00000000
1592	5353	0.71223827	7.23023058	-5.17008960	1647	7189	2.23426412	10.10614563	-0.92026670
1593	5354	-0.36960012	7.23023058	-4.81857900	1648	7190	1.56565123	10.10614563	-1.84053340
1594	5355	-1.45143851	7.23023058	-4.46706840	1649	7191	0.89703833	10.10614563	-2.76080010
1595	5356	-2.53327690	7.23023058	-4.11555780	1650	7192	-0.18480006	10.10614563	-2.40928950

Table 16: MIF1739 contains C_n , such that $C_n^* = \min(C_n)$ $n = 2, \dots, 1000$ (cont.)

#	i_p	X	Y	Z	#	i_p	X	Y	Z
1651	7193	-1.26663845	10.10614563	-2.05777890	1706	7250	4.46852824	8.31206897	-1.84053340
1652	7194	-2.34847684	10.10614563	-1.70626830	1707	7251	3.79991535	8.31206897	-2.76080010
1653	7195	-2.34847684	10.10614563	-0.56875610	1708	7252	3.13130245	8.31206897	-3.68106680
1654	7196	-2.34847684	10.10614563	0.56875610	1709	7256	-0.36960012	8.31206897	-4.81857900
1655	7197	-2.34847684	10.10614563	1.70626830	1710	7257	-1.45143851	8.31206897	-4.46706840
1656	7198	-1.26663845	10.10614563	2.05777890	1711	7258	-2.53327690	8.31206897	-4.11555780
1657	7199	-0.18480006	10.10614563	2.40928950	1712	7259	-3.61511529	8.31206897	-3.76404720
1658	7200	0.89703833	10.10614563	2.76080010	1713	7261	-4.69695368	8.31206897	-2.27502440
1659	7201	1.56565123	10.10614563	1.84053340	1714	7262	-4.69695368	8.31206897	-1.13751220
1660	7202	2.23426412	10.10614563	0.92026670	1715	7263	-4.69695368	8.31206897	0.00000000
1661	7203	3.87050269	9.50812007	0.00000000	1716	7264	-4.69695368	8.31206897	1.13751220
1662	7204	3.20188979	9.50812007	-0.92026670	1717	7265	-4.69695368	8.31206897	2.27502440
1663	7205	2.53327690	9.50812007	-1.84053340	1718	7267	-3.61511529	8.31206897	3.76404720
1664	7206	1.86466400	9.50812007	-2.76080010	1719	7268	-2.53327690	8.31206897	4.11555780
1665	7207	1.19605111	9.50812007	-3.68106680	1720	7269	-1.45143851	8.31206897	4.46706840
1666	7208	0.11421272	9.50812007	-3.32955620	1721	7270	-0.36960012	8.31206897	4.81857900
1667	7209	-0.96762567	9.50812007	-2.97804560	1722	7271	0.71223827	8.31206897	5.17008960
1668	7210	-2.04946406	9.50812007	-2.62653500	1723	7273	2.46268956	8.31206897	4.60133350
1669	7211	-3.13130245	9.50812007	-2.27502440	1724	7274	3.13130245	8.31206897	3.68106680
1670	7212	-3.13130245	9.50812007	-1.13751220	1725	7275	3.79991535	8.31206897	2.76080010
1671	7213	-3.13130245	9.50812007	0.00000000	1726	7276	4.46852824	8.31206897	1.84053340
1672	7214	-3.13130245	9.50812007	1.13751220	1727	7277	5.13714114	8.31206897	0.92026670
1673	7215	-3.13130245	9.50812007	2.27502440	1728	7294	-5.47977929	7.71404341	-1.70626830
1674	7216	-2.04946406	9.50812007	2.62653500	1729	7295	-5.47977929	7.71404341	-0.56875610
1675	7217	-0.96762567	9.50812007	2.97804560	1730	7296	-5.47977929	7.71404341	0.56875610
1676	7218	0.11421272	9.50812007	3.32955620	1731	7297	-5.47977929	7.71404341	1.70626830
1677	7219	1.19605111	9.50812007	3.68106680	1732	7301	-3.31610251	7.71404341	4.68431390
1678	7220	1.86466400	9.50812007	2.76080010	1733	7302	-2.23426412	7.71404341	5.03582450
1679	7221	2.53327690	9.50812007	1.84053340	1734	7303	-1.15242573	7.71404341	5.38733510
1680	7222	3.20188979	9.50812007	0.92026670	1735	7304	-0.07058734	7.71404341	5.73884570
1681	7223	4.83812836	8.91009452	0.00000000	1736	7308	3.43031523	7.71404341	4.60133350
1682	7224	4.16951547	8.91009452	-0.92026670	1737	7309	4.09892812	7.71404341	3.68106680
1683	7225	3.50090257	8.91009452	-1.84053340	1738	7310	4.76754102	7.71404341	2.76080010
1684	7226	2.83228968	8.91009452	-2.76080010	1739	7311	5.43615392	7.71404341	1.84053340
1685	7227	2.16367678	8.91009452	-3.68106680					
1686	7229	0.41322549	8.91009452	-4.24982290					
1687	7230	-0.66861290	8.91009452	-3.89831230					
1688	7231	-1.75045129	8.91009452	-3.54680170					
1689	7232	-2.83228968	8.91009452	-3.19529110					
1690	7233	-3.91412807	8.91009452	-2.84378050					
1691	7234	-3.91412807	8.91009452	-1.70626830					
1692	7235	-3.91412807	8.91009452	-0.56875610					
1693	7236	-3.91412807	8.91009452	0.56875610					
1694	7237	-3.91412807	8.91009452	1.70626830					
1695	7238	-3.91412807	8.91009452	2.84378050					
1696	7239	-2.83228968	8.91009452	3.19529110					
1697	7240	-1.75045129	8.91009452	3.54680170					
1698	7241	-0.66861290	8.91009452	3.89831230					
1699	7242	0.41322549	8.91009452	4.24982290					
1700	7243	1.49506388	8.91009452	4.60133350					
1701	7244	2.16367678	8.91009452	3.68106680					
1702	7245	2.83228968	8.91009452	2.76080010					
1703	7246	3.50090257	8.91009452	1.84053340					
1704	7247	4.16951547	8.91009452	0.92026670					
1705	7249	5.13714114	8.31206897	-0.92026670					

Table 17: MIF1739 contains C_n , such that $C_n^* = \min(C_n)$ $n = 2, \dots, 1000$ (cont.)

n	T	- E^{MIF}	- E^*	-($E^* - E^{MIF}$)	Adj	n	T	- E^{MIF}	- E^*	-($E^* - E^{MIF}$)	Adj
1000	1	6993.629435	7128.821829	135.192394	0	946	1	6593.942750	6721.248620	127.305870	1
999	1	6985.902614	7120.842638	134.940023	1	945	1	6586.835928	6713.940121	127.104193	1
998	1	6978.241464	7113.103883	134.862419	5	944	1	6579.729107	6706.631600	126.902493	1
997	1	6971.087388	7105.735481	134.648093	1	943	1	6571.915736	6698.737233	126.821497	3
996	1	6963.933352	7098.367102	134.433750	1	942	1	6564.808928	6691.428659	126.619731	1
995	1	6955.926596	7090.208621	134.282025	1	941	1	6557.196696	6683.553791	126.357095	5
994	1	6948.023102	7082.249979	134.226877	3	940	1	6549.888846	6676.224783	126.335937	7
993	1	6940.869074	7074.881405	134.012331	1	939	1	6542.281572	6668.356219	126.074648	5
992	1	6932.864440	7066.725015	133.860575	1	938	1	6535.129201	6660.986510	125.857309	1
991	1	6924.961703	7058.765030	133.803327	3	937	1	6527.366545	6653.157765	125.791221	3
990	1	6917.807708	7051.396344	133.588636	1	936	1	6520.214710	6645.788882	125.574172	1
989	1	6909.803103	7043.239479	133.436376	1	935	1	6512.609625	6637.923024	125.313399	5
988	1	6902.030783	7035.349936	133.319153	5	934	1	6505.035252	6630.868620	125.833368	23
987	1	6894.876803	7027.981154	133.104351	1	933	1	6497.968941	6623.609245	125.640304	1
986	1	6886.872360	7019.824521	132.952161	1	932	1	6490.902670	6616.349914	125.447244	1
985	1	6879.172616	7012.262026	133.089410	61	931	1	6483.836439	6609.090626	125.254187	1
984	1	6872.065567	7004.954394	132.888827	1	930	1	6476.770164	6601.831262	125.061099	1
983	1	6864.958520	6997.646753	132.688233	1	929	1	6469.703891	6594.571901	124.868010	1
982	1	6857.851475	6990.339103	132.487628	1	928	1	6462.637620	6587.312542	124.674922	1
981	1	6850.036687	6982.453534	132.416846	3	927	1	6455.571240	6580.053022	124.481782	1
980	1	6842.929649	6975.145854	132.216204	1	926	1	6448.504861	6572.793503	124.288642	1
979	1	6835.114884	6967.259714	132.144830	3	925	1	6441.438485	6565.533988	124.095503	1
978	1	6828.007853	6959.952005	131.944153	1	924	1	6434.332368	6558.225148	123.892780	1
977	1	6820.161938	6952.028508	131.866571	3	923	1	6437.852486	6552.722600	114.870114	23
976	1	6813.086086	6944.757565	131.671479	1	922	1	6421.908138	6546.271539	124.363400	1
975	1	6805.129064	6936.619136	131.490072	1	921	1	6414.841845	6539.012175	124.170330	1
974	1	6797.256767	6928.563000	131.306232	5	920	1	6407.775591	6531.752854	123.977263	1
973	1	6790.059868	6921.278396	131.218527	9	919	1	6400.709376	6524.493575	123.784199	1
972	1	6782.255647	6913.714239	131.458591	25	918	1	6393.643164	6517.234300	123.591136	1
971	1	6775.189273	6906.454831	131.265557	1	917	1	6386.576954	6509.975026	123.398072	1
970	1	6768.122939	6899.195466	131.072527	1	916	1	6379.510784	6502.715796	123.205013	1
969	1	6761.056348	6891.935744	130.879396	1	915	1	6372.444577	6495.456527	123.011950	1
968	1	6753.989758	6884.676024	130.686266	1	914	1	6365.378409	6488.197300	122.818891	1
967	1	6746.923103	6877.416196	130.493093	1	913	1	6358.312244	6480.938076	122.625832	1
966	1	6739.856274	6870.156135	130.299861	1	912	1	6351.246081	6473.678854	122.432773	1
965	1	6732.749336	6862.848135	130.098799	1	911	1	6344.179957	6466.419675	122.239718	1
964	1	6725.642401	6855.540126	129.897726	1	910	1	6337.113874	6459.160539	122.046665	1
963	1	6717.828309	6847.650109	129.821801	3	909	1	6328.294012	6450.140769	121.846757	1
962	1	6710.721380	6840.342072	129.620692	1	908	1	6320.468251	6442.132656	121.664405	1
961	1	6703.105164	6832.457397	129.352233	5	907	1	6312.742740	6434.224282	121.481543	1
960	1	6695.800389	6825.143469	129.343080	7	906	1	6305.552394	6426.853350	121.300956	3
959	1	6688.189198	6817.264754	129.075556	5	905	1	6298.486315	6419.594218	121.107903	1
958	1	6681.036191	6809.895503	128.859312	1	904	1	6289.667453	6410.575785	120.908332	1
957	1	6673.268269	6802.065906	128.797638	3	903	1	6281.842185	6402.568020	120.725835	1
956	1	6666.115273	6794.696561	128.581288	1	902	1	6274.117166	6394.659807	120.542641	1
955	1	6658.500433	6786.813661	128.313228	7	901	1	6266.927214	6387.288891	120.361676	3
954	1	6651.150418	6779.462540	128.312123	9	900	1	6259.861151	6380.029779	120.168629	1
953	1	6643.407817	6772.065512	128.657695	23	899	1	6251.042781	6371.011483	119.968702	1
952	1	6636.341520	6764.806171	128.464651	1	898	1	6243.218512	6363.005202	119.786690	1
951	1	6629.275211	6757.546799	128.271588	1	897	1	6235.493697	6355.096967	119.603269	1
950	1	6622.208903	6750.287429	128.078525	1	896	1	6228.304429	6347.726230	119.421801	3
949	1	6615.142344	6743.027703	127.885360	1	895	1	6221.238379	6340.467138	119.228759	1
948	1	6608.075824	6735.768021	127.692197	1	894	1	6212.420035	6331.448671	119.028636	1
947	1	6601.009267	6728.508299	127.499032	1	893	1	6204.595791	6323.442320	118.846529	1

Table 18: Results from MIF1739: type, initial, minimum, and difference of potential, and $\text{Adj}(C_{n+1}, C_n)$.

n	T	- E^{MIF}	- E^*	-($E^* - E^{MIF}$)	Adj	n	T	- E^{MIF}	- E^*	-($E^* - E^{MIF}$)	Adj
892	1	6196.870994	6315.533826	118.662832	1	838	1	5789.342198	5901.636273	112.294075	7
891	1	6189.681742	6308.162614	118.480872	3	837	1	5782.276279	5894.377564	112.101285	1
890	1	6182.615707	6300.903543	118.287835	1	836	1	5774.735034	5886.706637	111.971603	5
889	1	6173.769778	6291.887710	118.117931	1	835	1	5767.669481	5879.448440	111.778959	1
888	1	6165.973161	6283.878319	117.905158	3	834	1	5760.603572	5872.189749	111.586176	1
887	1	6158.248389	6275.969721	117.721332	1	833	1	5752.877886	5864.257422	111.379536	1
886	1	6151.059154	6268.598027	117.538873	3	832	1	5745.136150	5856.444416	111.308266	5
885	1	6143.993135	6261.338978	117.345843	1	831	1	5738.070245	5849.185743	111.115498	1
884	1	6135.147333	6252.323028	117.175695	1	830	1	5730.917342	5841.836126	110.918784	1
883	1	6126.142214	6244.427426	118.285212	35	829	1	5722.945480	5833.731091	110.785611	1
882	1	6119.076185	6237.168391	118.092205	1	828	1	5715.044003	5825.829051	110.785049	5
881	1	6111.533654	6229.505624	117.971970	5	827	1	5707.908971	5818.502232	110.593261	1
880	1	6104.467596	6222.246563	117.778967	1	826	1	5700.179597	5810.600094	110.420498	1
879	1	6097.401577	6214.987544	117.585966	1	825	1	5692.472470	5802.605436	110.132967	9
878	1	6089.859404	6207.324053	117.464650	5	824	1	5685.273522	5795.202927	109.929405	11
877	1	6082.793356	6200.065009	117.271653	1	823	2	5640.540570	5787.452061	146.911491	1201
876	1	6075.727347	6192.806006	117.078659	1	822	2	5633.043473	5779.768096	146.724623	1
875	1	6067.754177	6184.703843	116.949667	1	821	2	5625.467608	5772.084288	146.616680	3
874	1	6059.949893	6176.732121	116.782228	1	820	2	5618.007058	5764.577273	146.570215	5
873	1	6051.980095	6168.630532	116.650437	1	819	2	5611.094122	5757.354578	146.260456	9
872	1	6044.631522	6161.282869	116.651347	3	818	2	5603.444963	5749.670074	146.225111	7
871	1	6036.900670	6153.387416	116.486746	1	817	1	5632.704578	5742.081610	109.377032	1087
870	1	6029.170269	6145.491276	116.321007	1	816	2	5588.560634	5734.477393	145.916758	1091
869	1	6021.207242	6137.389533	116.182291	1	815	2	5581.495638	5727.254474	145.758836	17
868	1	6014.091772	6129.908389	115.816617	9	814	1	5611.035654	5719.889178	108.853524	1087
867	1	6005.820118	6121.863695	116.043577	11	813	1	5603.539800	5712.251749	108.711950	5
866	1	5998.304229	6114.031451	115.727222	7	812	1	5596.473942	5704.993260	108.519318	1
865	1	5991.075351	6106.601284	115.525934	7	811	1	5589.367962	5697.697979	108.330017	1
864	1	5983.345427	6098.704534	115.359107	1	810	1	5580.973034	5689.923053	108.950019	23
863	1	5975.623916	6091.408213	115.784297	23	809	1	5573.906800	5682.669719	108.762919	1
862	1	5968.557897	6084.149283	115.591385	1	808	1	5567.044096	5675.681568	108.637472	3
861	1	5961.491919	6076.890393	115.398475	1	807	1	5559.977956	5668.428355	108.450399	1
860	1	5953.950674	6069.226173	115.275498	5	806	1	5553.115169	5661.439825	108.324656	3
859	1	5946.884666	6061.967261	115.082595	1	805	1	5546.049123	5654.186734	108.137611	1
858	1	5939.818697	6054.708390	114.889693	1	804	1	5538.984456	5646.930187	107.945731	1
857	1	5932.277458	6047.043737	114.766279	5	803	1	5531.919829	5639.673682	107.753853	1
856	1	5925.211460	6039.784843	114.573384	1	802	1	5524.855204	5632.417178	107.561974	1
855	1	5918.145501	6032.525990	114.380490	1	801	1	5517.790581	5625.160676	107.370095	1
854	1	5910.173165	6024.423236	114.250070	1	800	1	5510.725997	5617.904215	107.178218	1
853	1	5902.387568	6016.456651	114.069084	3	799	1	5503.660170	5610.645858	106.985688	1
852	1	5894.633819	6008.497839	113.864020	3	798	1	5495.701333	5602.537500	106.836167	1
851	1	5887.070438	6000.993302	113.922865	5	797	1	5487.904229	5594.570648	106.666419	1
850	1	5879.698107	5993.301055	113.602949	7	796	1	5480.152640	5586.607063	106.454423	3
849	1	5872.498281	5985.898651	113.400371	1	795	1	5472.607848	5579.086419	106.478571	5
848	1	5864.530113	5977.796569	113.266456	1	794	1	5465.217433	5571.405561	106.188127	7
847	1	5856.668546	5969.960883	113.292337	3	793	1	5458.019144	5564.001405	105.982261	1
846	1	5849.486591	5962.578501	113.091910	7	792	1	5450.064475	5555.893926	105.829451	1
845	1	5841.756965	5954.680186	112.923221	7	791	1	5442.209306	5548.042380	105.833074	3
844	1	5834.051674	5946.673717	112.622043	9	790	1	5435.028887	5540.657899	105.629012	1
843	1	5826.852198	5939.271635	112.419437	1	789	1	5427.306056	5532.765423	105.459367	7
842	1	5818.746032	5931.353202	112.607169	13	788	1	5419.553258	5524.788962	105.235704	7
841	1	5811.014948	5923.823608	112.808661	23	787	1	5412.385742	5517.353762	104.968019	5
840	1	5803.949019	5916.564882	112.615863	1	786	1	5404.631761	5509.611098	104.979336	3
839	1	5796.407993	5908.894773	112.486780	5	785	1	5397.451747	5502.226799	104.775051	1

Table 19: Results from MIF1739: type, initial, minimum, and difference of potential, and $\text{Adj}(C_{n+1}, C_n)$ (cont.).

n	T	- E^{MIF}	- E^*	-($E^* - E^{MIF}$)	Adj	n	T	- E^{MIF}	- E^*	-($E^* - E^{MIF}$)	Adj
784	1	5389.030236	5494.160631	105.130395	23	730	1	4991.452265	5088.472966	97.020701	9
783	1	5381.965653	5486.904329	104.938676	1	729	1	4984.281993	5081.042333	96.760340	5
782	1	5374.901110	5479.648067	104.746957	1	728	1	4976.531159	5073.284623	96.753464	13
781	1	5367.835486	5472.390187	104.554701	1	727	1	4969.351473	5065.896282	96.544809	15
780	1	5360.293437	5464.707535	104.414099	5	726	1	4960.988873	5057.800861	96.811988	31
779	1	5353.228903	5457.451291	104.222387	1	725	1	4953.925068	5050.546387	96.621319	1
778	1	5346.163522	5450.193696	104.030174	1	724	1	4946.860866	5043.291232	96.430366	27
777	1	5338.439371	5442.257421	103.818049	1	723	1	4939.757131	5035.994450	96.237319	27
776	1	5330.698224	5434.438365	103.740140	5	722	1	4932.258457	5028.346115	96.087658	5
775	1	5323.632860	5427.180826	103.547966	7	721	1	4925.194497	5021.091222	95.896725	25
774	1	5316.481493	5419.829556	103.348062	7	720	1	4918.090962	5013.794518	95.703556	25
773	1	5308.757594	5411.893332	103.135739	7	719	1	4910.264293	5005.931540	95.667246	3
772	1	5301.102403	5404.167708	103.065305	5	718	1	4903.191938	4998.669249	95.477311	21
771	1	5293.951170	5396.816491	102.865322	1	717	1	4904.651693	4991.660582	87.008890	19
770	1	5286.800054	5389.465326	102.665272	1	716	1	4888.736052	4984.410587	95.674535	1
769	1	5278.845753	5381.353744	102.507991	1	715	1	4890.723551	4977.414567	86.691016	3
768	1	5270.964299	5373.460266	102.495967	3	714	1	4874.808087	4970.163701	95.355613	1
767	1	5263.813226	5366.108742	102.295517	1	713	1	4876.595698	4962.912199	86.316501	3
766	1	5256.090660	5358.212959	102.122299	7	712	1	4869.531949	4955.661206	86.129257	1
765	1	5248.338065	5350.233771	101.895705	1	711	1	4862.468373	4948.407145	85.938772	1
764	1	5241.159607	5342.800525	101.640918	11	710	1	4855.404837	4941.153121	85.748283	1
763	1	5233.416762	5335.050154	101.633392	13	709	1	4848.341341	4933.899132	85.557791	1
762	2	5192.475873	5327.706748	135.230876	991	708	1	4832.426516	4926.642617	94.216101	1
761	2	5185.411783	5320.483317	135.071534	1	707	1	4824.703394	4918.698384	93.994991	1
760	2	5177.786537	5312.718230	134.931693	1	706	1	4825.812477	4910.881054	85.068576	5
759	2	5170.963727	5305.477507	134.513780	5	705	1	4809.898060	4903.616305	93.718246	1
758	2	5163.717919	5298.253262	134.535343	1	704	1	4802.747721	4896.261781	93.514060	1
757	2	5156.051225	5290.488239	134.437014	5	703	1	4795.024622	4888.317218	93.292596	1
756	2	5149.151492	5283.248304	134.096812	3	702	1	4787.369654	4880.589099	93.219445	5
755	2	5141.905696	5276.024042	134.118346	1	701	1	4780.219332	4873.234479	93.015147	1
754	2	5134.043399	5267.902856	133.859456	1	700	1	4773.069017	4865.879825	92.810807	1
753	1	5159.513844	5260.486552	100.972708	983	699	1	4765.345942	4857.934939	92.588997	1
752	1	5161.506224	5253.376181	91.869957	7	698	1	4757.690995	4850.206297	92.515302	5
751	1	5145.585437	5246.240920	100.655483	5	697	1	4750.540697	4842.851550	92.310853	1
750	1	5147.577647	5239.131663	91.554015	3	696	1	4743.390405	4835.496768	92.106363	1
749	1	5131.657036	5231.995215	100.338179	1	695	1	4735.436565	4827.378185	91.941620	1
748	1	5124.592416	5224.742084	100.149668	1	694	1	4727.555156	4819.465378	91.910223	5
747	1	5117.527914	5217.489081	99.961167	1	693	1	4720.404874	4812.110308	91.705434	7
746	1	5110.464308	5210.234680	99.770372	1	692	1	4712.682769	4804.209895	91.527126	1
745	1	5103.400704	5202.980280	99.579576	1	691	2	4675.388705	4796.534940	121.146236	867
744	1	5096.336252	5195.724475	99.388223	1	690	1	4697.586809	4788.862655	91.275846	855
743	1	5089.271840	5188.468706	99.196866	1	689	2	4660.828876	4781.514121	120.685245	853
742	1	5081.548598	5180.529718	98.981120	1	688	2	4653.582022	4774.294327	120.712305	1
741	1	5073.807488	5172.706364	98.898876	5	687	2	4646.090604	4766.617576	120.526972	7
740	1	5066.743092	5165.450663	98.707570	1	686	2	4639.141762	4759.274013	120.132251	11
739	1	5059.592635	5158.098279	98.505644	1	685	2	4631.777085	4752.053386	120.276300	7
738	1	5051.869411	5150.158874	98.289462	1	684	2	4624.325526	4744.376499	120.050973	7
737	1	5044.214370	5142.432052	98.217683	5	683	2	4617.153120	4737.032869	119.879749	5
736	1	5037.063924	5135.079541	98.015617	1	682	2	4610.088815	4729.812239	119.723424	1
735	1	5029.913485	5127.726976	97.813491	1	681	1	4640.738475	4722.557903	81.819428	845
734	1	5021.959308	5119.611670	97.652362	1	680	1	4633.873790	4715.562864	81.689074	3
733	1	5014.077620	5111.708608	97.630988	3	679	1	4626.810599	4708.311551	81.500951	1
732	1	5006.927194	5104.355782	97.428588	7	678	1	4619.747526	4701.060363	81.312837	1
731	1	4999.204735	5096.457618	97.252882	7	677	1	4612.684952	4693.808242	81.123290	1

Table 20: Results from MIF1739: type, initial, minimum, and difference of potential, and $\text{Adj}(C_{n+1}, C_n)$ (cont.).

n	T	- E ^{MIF}	- E*	-(E* - E ^{MIF})	Adj	n	T	- E ^{MIF}	- E*	-(E* - E ^{MIF})	Adj
676	1	4605.622417	4686.556156	80.933739	1	622	1	4212.818660	4285.785595	72.966935	5
675	1	4598.558789	4679.303997	80.745207	1	621	1	4205.668824	4278.428797	72.759973	1
674	1	4591.495168	4672.051833	80.556665	1	620	1	4189.767363	4270.926392	81.159029	1
673	1	4575.585597	4664.692986	89.107389	1	619	1	4182.045625	4262.967594	80.921969	1
672	1	4567.862777	4656.743036	88.880259	1	618	1	4183.148787	4255.392520	72.243733	5
671	1	4568.967545	4649.022423	80.054878	5	617	1	4175.999673	4248.036524	72.036850	1
670	1	4561.817349	4641.668692	79.851343	7	616	1	4160.098779	4240.525779	80.426999	1
669	1	4545.908345	4634.299877	88.391532	9	615	1	4161.072959	4232.860448	71.787489	3
668	1	4538.186248	4626.349994	88.163746	1	614	1	4145.172434	4225.342009	80.169575	1
667	1	4539.295837	4618.644337	79.348500	5	613	1	4146.330756	4217.643274	71.312517	7
666	1	4532.146364	4611.291368	79.145003	1	612	1	4130.430429	4210.124370	79.693941	1
665	1	4516.237926	4603.912775	87.674849	1	611	1	4131.404469	4202.467061	71.062592	3
664	2	4479.879176	4596.197823	116.318647	831	610	1	4115.504510	4194.940511	79.436001	5
663	2	4472.515260	4588.975495	116.460234	7	609	1	4116.480722	4187.291689	70.810966	3
662	2	4464.969689	4581.205775	116.236086	1	608	1	4100.581132	4179.757692	79.176561	1
661	2	4458.074424	4573.952330	115.877906	5	607	1	4101.736213	4172.072641	70.336429	7
660	2	4450.828707	4566.730001	115.901294	7	606	1	4085.836820	4164.538164	78.701344	1
659	2	4443.283153	4558.959717	115.676564	5	605	1	4086.812572	4156.896269	70.083698	3
658	2	4436.387581	4551.706161	115.318579	3	604	1	4079.261858	4149.486406	70.224548	45
657	2	4429.024024	4544.483116	115.459092	7	603	1	4072.198969	4142.233179	70.034210	1
656	2	4421.519974	4536.712799	115.192825	5	602	1	4065.136086	4134.979952	69.843866	1
655	2	4414.583100	4529.460139	114.877039	3	601	1	4058.073210	4127.726727	69.653517	1
654	2	4407.337742	4522.237084	114.899342	1	600	1	4050.970757	4120.428618	69.457862	1
653	2	4399.389090	4514.127901	114.738811	1	599	1	4043.868310	4113.130489	69.262179	1
652	2	4391.620860	4506.152061	114.531201	1	598	1	4036.765870	4105.832339	69.066469	1
651	2	4384.707146	4498.828911	114.121765	5	597	1	4020.867708	4098.273955	77.406247	1
650	2	4376.990536	4490.882106	113.891569	1	596	1	4021.647351	4090.920981	69.273630	23
649	1	4406.629243	4483.231116	76.601873	797	595	1	4014.793714	4083.948931	69.155218	3
648	1	4390.723235	4475.807040	85.083805	1	594	1	4007.731603	4076.696662	68.965059	1
647	1	4391.730943	4468.096464	76.365520	3	593	1	4000.669523	4069.444445	68.774922	1
646	1	4384.371622	4461.078058	76.706436	19	592	1	3993.607561	4062.192358	68.584797	1
645	1	4377.309873	4453.827853	76.517980	1	591	1	3986.545145	4054.939563	68.394418	1
644	1	4370.448463	4446.837306	76.388843	3	590	1	3979.482735	4047.686770	68.204034	1
643	1	4363.386895	4439.587263	76.200368	1	589	1	3972.420234	4040.433756	68.013522	1
642	1	4356.324533	4432.336003	76.011470	1	588	1	3965.357411	4033.180253	67.822841	1
641	1	4349.261582	4425.083803	75.822221	1	587	1	3958.255166	4025.881619	67.626453	1
640	1	4342.198749	4417.831733	75.632984	1	586	1	3951.152926	4018.582963	67.430036	1
639	1	4335.135493	4410.578935	75.443443	1	585	1	3935.256754	4010.990978	75.734224	1
638	1	4328.072243	4403.326136	75.253893	1	584	1	3935.955170	4003.590347	67.635177	23
637	1	4320.969630	4396.029728	75.060098	1	583	1	3929.247892	3996.736300	67.488408	1
636	1	4305.065613	4388.569826	83.504213	1	582	1	3922.540639	3989.882038	67.341399	1
635	1	4306.073719	4380.895395	74.821676	3	581	1	3915.478575	3982.629525	67.150950	1
634	1	4290.170070	4373.428774	83.258705	1	580	1	3908.416629	3975.377143	66.960513	1
633	1	4291.122144	4366.074217	74.952073	19	579	1	3901.354713	3968.124799	66.770086	1
632	1	4284.782012	4359.590022	74.808010	1	578	1	3894.292803	3960.872458	66.579654	1
631	1	4277.720957	4352.341083	74.620126	1	577	1	3887.230453	3953.619403	66.388950	1
630	1	4270.658724	4345.089534	74.430809	1	576	1	3880.168220	3946.366479	66.198259	1
629	1	4263.595816	4337.836978	74.241162	1	575	1	3873.105879	3939.113424	66.007545	1
628	1	4256.533026	4330.584553	74.051527	1	574	1	3866.043655	3931.860500	65.816845	1
627	1	4249.470243	4323.332127	73.861884	1	573	1	3858.941629	3924.561134	65.619506	1
626	1	4242.407466	4316.079701	73.672235	1	572	1	3851.839608	3917.261719	65.422110	1
625	1	4235.344807	4308.827405	73.482598	1	571	5	3839.705722	3909.961214	70.255492	41
624	1	4219.442780	4301.333497	81.890717	1	570	1	3837.107930	3902.741575	65.633645	23
623	1	4211.720320	4293.374481	81.654161	1	569	1	3830.407630	3895.895147	65.487517	1

Table 21: Results from MIF1739: type, initial, minimum, and difference of potential, and Adj(C_{n+1}, C_n) (cont.).

n	T	$-E^{MIF}$	$-E^*$	$-(E^* - E^{MIF})$	Adj	n	T	$-E^{MIF}$	$-E^*$	$-(E^* - E^{MIF})$	Adj
568	1	3823.709861	3889.051094	65.341234	1	514	1	3429.039452	3487.179880	58.140429	1
567	1	3816.647847	3881.798364	65.150517	1	513	1	3421.978326	3479.926793	57.948467	1
566	1	3809.585951	3874.545764	64.959813	1	512	1	3414.449890	3472.314244	57.864354	5
565	1	3802.524173	3867.293295	64.769122	1	511	1	3407.388678	3465.061048	57.672370	1
564	5	3795.116425	3860.238707	65.122283	13	510	1	3400.327585	3457.807978	57.480394	1
563	5	3788.439649	3853.287758	64.848109	1	509	1	3392.799163	3450.193949	57.394787	5
562	1	3782.730387	3847.376685	64.646298	3	508	1	3385.737983	3442.940773	57.202790	1
561	1	3777.819423	3842.393626	64.574203	1	507	1	3378.676922	3435.687722	57.010800	1
560	1	3770.757437	3835.140762	64.383325	1	506	1	3370.719156	3427.621193	56.902037	1
559	1	3763.695568	3827.888028	64.192460	1	505	1	3362.815204	3419.730528	56.915323	3
558	1	3756.633818	3820.635426	64.001608	1	504	1	3355.754161	3412.477434	56.723273	1
557	1	3749.572074	3813.382827	63.810753	1	503	1	3348.044682	3404.627600	56.582918	1
556	1	3742.510336	3806.130232	63.619895	1	502	1	3340.259486	3397.196422	56.936937	15
555	1	3735.448717	3798.877768	63.429050	1	501	1	3333.200659	3389.946441	56.745782	1
554	1	3728.386989	3791.625175	63.238186	1	500	1	3326.139753	3382.693487	56.553734	1
553	1	3721.325379	3784.372712	63.047334	1	499	1	3319.078965	3375.440662	56.361698	1
552	1	3714.263775	3777.120254	62.856479	1	498	1	3312.017951	3368.187444	56.169493	1
551	1	3707.202178	3769.867800	62.665621	1	497	1	3304.489924	3360.564557	56.074633	5
550	1	3700.140700	3762.615476	62.474777	1	496	1	3297.429168	3353.311762	55.882594	1
549	1	3693.079339	3755.363284	62.283945	1	495	1	3290.368187	3346.058571	55.690383	1
548	1	3677.189367	3747.679419	70.490053	1	494	1	3282.839389	3338.432495	55.593106	5
547	1	3668.377049	3738.680646	70.303597	1	493	1	3275.779483	3331.180850	55.401367	1
546	1	3660.558832	3730.692217	70.133385	1	492	1	3268.718534	3323.927687	55.209153	1
545	1	3661.549412	3723.174136	61.624724	5	491	1	3260.999612	3316.048882	55.049270	1
544	1	3654.488069	3715.921811	61.433742	1	490	1	3253.288591	3308.285790	54.997200	5
543	1	3638.599528	3708.210901	69.611373	1	489	1	3246.227656	3301.032607	54.804951	1
542	1	3629.764001	3699.227269	69.463268	1	488	1	3239.081518	3293.718435	54.636917	1
541	1	3630.147093	3691.070873	60.923780	5	487	1	3231.338642	3285.966242	54.627601	3
540	1	3622.967724	3683.741345	60.773621	3	486	1	3224.209993	3278.672947	54.462954	1
539	1	3615.906427	3676.488957	60.582530	1	485	1	3216.571856	3271.723567	55.151712	31
538	1	3607.112108	3667.569346	60.457238	1	484	1	3209.509134	3264.493944	54.984810	1
537	1	3599.311889	3659.706286	60.394397	1	483	1	3202.655502	3257.513447	54.857945	3
536	1	3591.572622	3651.645144	60.072523	5	482	1	3195.593069	3250.284319	54.691250	1
535	1	3584.395665	3644.316423	59.920758	3	481	1	3188.739181	3243.302482	54.563300	3
534	1	3577.334415	3637.063978	59.729564	1	480	1	3181.677038	3236.073847	54.396809	1
533	1	3567.755933	3628.252883	60.496950	23	479	1	3174.823656	3229.090010	54.266354	3
532	1	3560.694566	3620.999928	60.305362	1	478	1	3167.761801	3221.861849	54.100047	1
531	1	3553.633317	3613.747101	60.113784	1	477	1	3160.908926	3214.876229	53.967303	3
530	1	3546.100926	3606.138371	60.037445	5	476	1	3153.847360	3207.648521	53.801161	1
529	1	3539.039591	3598.885418	59.845827	1	475	1	3146.994228	3200.661820	53.667591	3
528	1	3531.978353	3591.632543	59.654191	1	474	1	3139.932952	3193.434565	53.501613	1
527	1	3524.447114	3584.021780	59.574666	5	473	1	3132.875069	3186.185673	53.310604	1
526	1	3517.385789	3576.768781	59.382991	1	472	1	3125.817305	3178.936910	53.119604	1
525	1	3510.324583	3569.515910	59.191328	1	471	1	3118.759548	3171.688153	52.928605	1
524	1	3502.794474	3561.903096	59.108622	5	470	1	3111.701796	3164.439402	52.737605	1
523	1	3495.733182	3554.650103	58.916921	1	469	1	3104.644164	3157.190780	52.546616	1
522	1	3488.672008	3547.397239	58.725231	1	468	1	3097.583389	3149.937648	52.354260	1
521	1	3480.712469	3539.331418	58.618950	1	467	1	3089.639323	3141.864153	52.224831	1
520	1	3472.791168	3531.446857	58.655689	3	466	1	3081.743494	3133.956743	52.213249	3
519	1	3465.730012	3524.193917	58.463905	1	465	1	3074.682763	3126.703679	52.020915	1
518	1	3458.014162	3516.340448	58.326286	1	464	1	3066.974516	3118.849641	51.875125	1
517	1	3450.222697	3508.938736	58.716039	15	463	1	3059.268800	3110.995000	51.726199	1
516	1	3443.161693	3501.685912	58.524219	1	462	1	3051.665441	3103.692087	52.026646	13
515	1	3436.100696	3494.433094	58.332398	1	461	1	3044.605440	3096.465023	51.859583	1

Table 22: Results from MIF1739: type, initial, minimum, and difference of potential, and $\text{Adj}(C_{n+1}, C_n)$ (cont.).

n	T	$-E^{MIF}$	$-E^*$	$-(E^* - E^{MIF})$	Adj	n	T	$-E^{MIF}$	$-E^*$	$-(E^* - E^{MIF})$	Adj
460	1	3037.549004	3089.218142	51.669138	1	406	1	2652.605944	2696.958552	44.352608	1
459	1	3030.492575	3081.971267	51.478692	1	405	1	2645.550990	2689.713734	44.162745	1
458	1	3023.434904	3074.722501	51.287596	1	404	1	2637.837823	2681.814373	43.976550	1
457	1	3016.377352	3067.473860	51.096507	1	403	1	2630.124666	2674.029018	43.904352	5
456	1	3009.317001	3060.221313	50.904312	1	402	1	2623.069773	2666.784339	43.714566	1
455	1	3001.785917	3052.572975	50.787059	5	401	1	2615.929390	2659.459309	43.529918	1
454	1	2994.728397	3045.324373	50.595976	1	400	1	2608.201551	2651.675335	43.473783	3
453	1	2987.668895	3038.072927	50.404032	1	399	1	2601.078657	2644.371470	43.292813	5
452	1	2979.953367	3030.187369	50.234003	1	398	1	2593.335869	2636.566153	43.230283	3
451	1	2972.242624	3022.415641	50.173017	5	397	1	2586.230465	2629.283637	43.053172	1
450	1	2965.183184	3015.164293	49.981109	1	396	1	2578.931626	2622.026782	43.095156	15
449	1	2958.040440	3007.846605	49.806165	1	395	1	2571.876147	2614.796092	42.919944	1
448	1	2950.313589	3000.081058	49.767470	3	394	1	2564.820539	2607.564869	42.744331	17
447	1	2943.188333	2992.783729	49.595396	11	393	1	2557.766809	2600.322076	42.555267	1
446	1	2935.630276	2985.461112	49.830836	15	392	1	2551.004763	2593.731432	42.726668	15
445	1	2928.573948	2978.214367	49.640419	1	391	1	2544.671625	2587.251965	42.580340	1
444	1	2921.516481	2970.965828	49.449347	1	390	1	2537.616558	2580.021240	42.404682	1
443	1	2914.584533	2964.265503	49.680970	17	389	1	2530.759464	2573.024522	42.265058	3
442	1	2907.525591	2957.035985	49.510394	1	388	1	2523.704424	2565.793770	42.089345	1
441	1	2900.670065	2950.044086	49.374022	3	387	1	2516.847400	2558.796497	41.949097	3
440	1	2893.611411	2942.814971	49.203560	1	386	1	2509.792388	2551.565720	41.773333	1
439	1	2886.755616	2935.822327	49.066712	3	385	1	2502.737827	2544.335413	41.597587	1
438	1	2879.698026	2928.593271	48.895244	5	384	1	2495.682322	2537.103074	41.420752	1
437	1	2872.842008	2921.599324	48.757315	3	383	1	2488.626842	2529.870662	41.243821	1
436	1	2865.783671	2914.370506	48.586834	1	382	1	2481.574043	2522.629194	41.055151	1
435	1	2858.928421	2907.376080	48.447660	3	381	1	2474.521363	2515.387833	40.866471	1
434	1	2851.870111	2900.147182	48.277071	1	380	1	2466.808870	2507.480023	40.671153	1
433	1	2844.812253	2892.918777	48.106524	1	379	1	2459.095741	2499.684891	40.589150	5
432	1	2837.756882	2885.673325	47.916443	1	378	1	2452.043122	2492.443691	40.400569	1
431	1	2830.701518	2878.427881	47.726363	1	377	1	2444.903414	2485.115011	40.211597	1
430	1	2823.644171	2871.179553	47.535382	1	376	1	2437.199711	2477.339088	40.139377	3
429	1	2816.586943	2863.931336	47.344392	1	375	1	2430.077492	2470.032175	39.954683	1
428	1	2808.873502	2856.041341	47.167839	1	374	1	2422.728585	2462.567918	39.839333	3
427	1	2801.162262	2848.263899	47.101638	5	373	1	2415.607141	2455.261852	39.654711	1
426	1	2794.105095	2841.015818	46.910723	1	372	1	2408.376257	2448.145557	39.769300	13
425	1	2786.964438	2833.695861	46.731423	1	371	1	2401.322711	2440.915149	39.592438	1
424	1	2779.236276	2825.919312	46.683037	3	370	1	2394.268315	2433.683009	39.414694	1
423	1	2772.113108	2818.620347	46.507239	1	369	1	2387.213555	2426.449891	39.236336	1
422	1	2764.369996	2810.822287	46.452291	3	368	1	2380.088918	2419.406128	39.317210	15
421	1	2757.027147	2803.561840	46.534694	15	367	1	2373.756078	2412.928006	39.171928	1
420	1	2749.970208	2796.332973	46.362764	1	366	1	2367.058364	2406.102774	39.044410	1
419	1	2742.913081	2789.103123	46.190042	1	365	1	2360.005041	2398.871608	38.866567	1
418	1	2735.957333	2782.294096	46.336763	15	364	1	2353.157306	2391.887487	38.730182	3
417	1	2729.623061	2775.814039	46.190977	1	363	1	2346.104010	2384.656316	38.552306	1
416	1	2722.566056	2768.583578	46.017522	1	362	1	2339.260909	2377.676606	38.415697	3
415	1	2715.710253	2761.589267	45.879014	3	361	1	2332.207641	2370.445427	38.237785	1
414	1	2708.653537	2754.359151	45.705614	1	360	1	2325.153349	2363.212317	38.058969	1
413	1	2701.797511	2747.363773	45.566262	3	359	1	2318.099507	2355.979723	37.880216	1
412	1	2694.740823	2740.133627	45.392804	1	358	1	2310.838849	2348.782315	37.943466	7
411	1	2687.884836	2733.137602	45.252766	3	357	1	2304.451242	2342.300677	37.849435	5
410	1	2680.828176	2725.907425	45.079249	1	356	1	2298.118960	2335.824444	37.705484	1
409	1	2673.771966	2718.677731	44.905765	1	355	1	2291.787129	2329.348216	37.561087	1
408	1	2666.716207	2711.448516	44.732309	1	354	1	2284.734096	2322.116283	37.382186	1
407	1	2659.661017	2704.203479	44.542463	1	353	1	2277.679887	2314.882331	37.202443	1

Table 23: Results from MIF1739: type, initial, minimum, and difference of potential, and $\text{Adj}(C_{n+1}, C_n)$ (cont.).

n	T	- E ^{MIF}	- E*	-(E* - E ^{MIF})	Adj	n	T	- E ^{MIF}	- E*	-(E* - E ^{MIF})	Adj
352	1	2270.626129	2307.648892	37.022763	1	298	1	1898.393646	1927.638785	29.245140	1
351	1	2263.572396	2300.415404	36.843008	1	297	1	1891.343530	1920.405571	29.062041	1
350	1	2256.518688	2293.181867	36.663179	1	296	1	1882.550887	1911.461967	28.911080	1
349	1	2249.465430	2285.948844	36.483414	1	295	1	1874.752345	1903.525774	28.773429	1
348	1	2242.416025	2278.712819	36.296794	1	294	1	1867.054052	1895.687896	28.633843	1
347	1	2234.704330	2270.792335	36.088006	1	293	1	1859.902111	1888.427400	28.525288	3
346	1	2226.994520	2262.986228	35.991708	5	292	1	1852.852066	1881.193243	28.341177	1
345	1	2219.941303	2255.752944	35.811641	1	291	1	1844.086525	1872.335299	28.248774	1
344	1	2212.802392	2248.419339	35.616947	1	290	1	1836.329593	1864.509413	28.179820	1
343	1	2205.099362	2240.629347	35.529985	3	289	1	1828.640014	1857.246000	28.605985	15
342	1	2197.977940	2233.317755	35.339815	1	288	1	1821.590181	1850.010842	28.420662	1
341	1	2190.631024	2225.849333	35.218309	3	287	1	1814.539448	1842.774084	28.234636	1
340	1	2183.340089	2218.615332	35.275244	13	286	1	1807.489165	1835.537846	28.048681	1
339	1	2176.287220	2211.382035	35.094814	1	285	1	1800.439333	1828.302131	27.862797	1
338	1	2169.234478	2204.148933	34.914456	1	284	1	1792.939032	1820.787123	27.848091	5
337	5	2149.955703	2197.741651	47.785948	61	283	1	1785.888890	1813.550736	27.661846	1
336	5	2142.902576	2190.508068	47.605492	1	282	1	1778.319798	1806.565298	28.245501	15
335	5	2137.753526	2183.512126	45.758600	3	281	1	1771.276824	1799.338553	28.061729	1
334	5	2130.700413	2176.278417	45.578003	5	280	1	1764.429412	1792.417316	27.987904	3
333	5	2125.554212	2169.283670	43.729458	3	279	1	1757.386493	1785.190407	27.803914	1
332	1	2128.239949	2162.436139	34.196190	47	278	1	1750.344025	1777.964004	27.619979	1
331	1	2121.547006	2155.607546	34.060540	1	277	1	1743.301140	1770.737074	27.435934	1
330	1	2114.494242	2148.373452	33.879209	1	276	1	1736.258706	1763.510651	27.251945	1
329	1	2107.672594	2141.430727	33.758134	3	275	1	1729.209231	1756.274006	27.064775	1
328	5	2091.695343	2134.488722	42.793378	39	274	1	1722.159781	1749.037375	26.877594	1
327	5	2086.345213	2128.150926	41.805713	1	273	1	1715.109863	1741.799810	26.689947	1
326	5	2079.292206	2120.916339	41.624133	1	272	1	1708.060395	1734.562757	26.502362	1
325	5	2074.149991	2113.917005	39.767014	3	271	1	1700.514961	1727.556298	27.041338	15
324	5	2067.097290	2106.682396	39.585106	1	270	1	1693.475651	1720.333106	26.857456	5
323	1	2067.000774	2099.995344	32.994570	31	269	1	1686.631238	1713.405225	26.773987	3
322	1	2060.311945	2093.169666	32.857721	1	268	1	1679.592470	1706.182605	26.590135	1
321	1	2053.623257	2086.343410	32.720153	1	267	1	1672.553224	1698.959265	26.406041	1
320	1	2046.570605	2079.108659	32.538054	1	266	1	1665.511040	1691.731780	26.220740	1
319	1	2039.518404	2071.874428	32.356024	1	265	1	1658.468881	1684.504305	26.035423	1
318	5	2028.271381	2064.797071	36.525689	23	264	1	1651.419656	1677.266825	25.847170	1
317	5	2022.926151	2058.468188	35.542037	1	263	1	1643.908390	1670.097576	26.189186	17
316	5	2017.582740	2052.140774	34.558034	1	262	1	1636.816262	1662.887875	26.071613	1
315	1	2013.045245	2044.980920	31.935675	13	261	1	1630.460154	1656.388419	25.928265	23
314	1	2006.371760	2038.173131	31.801371	1	260	1	1623.421049	1649.164496	25.743447	1
313	1	1999.726918	2031.396713	31.669795	1	259	1	1616.377673	1642.110092	25.732419	25
312	1	1993.110717	2024.652123	31.541407	1	258	1	1610.763219	1636.390612	25.627392	1
311	1	1986.399461	2017.838110	31.438648	1	257	1	1603.708683	1629.213139	25.504456	1
310	5	1980.786610	2012.098565	31.311955	3	256	1	1596.879165	1622.245574	25.366409	3
309	1	1975.959254	2007.218985	31.259731	1	255	1	1589.825777	1615.070412	25.244635	1
308	1	1968.906749	1999.983300	31.076551	1	254	1	1582.995245	1608.097732	25.102487	3
307	1	1961.854695	1992.748134	30.893439	1	253	1	1575.943006	1600.924857	24.981852	1
306	1	1954.803092	1985.513488	30.710396	1	252	1	1569.118887	1593.947314	24.828427	3
305	1	1947.751514	1978.278824	30.527311	1	251	1	1562.067796	1586.776382	24.708586	1
304	1	1940.699961	1971.044144	30.344183	1	250	1	1555.238948	1579.794975	24.556027	3
303	1	1933.648858	1963.809983	30.161125	1	249	1	1548.189006	1572.626135	24.437129	1
302	1	1926.597340	1956.575239	29.977899	1	248	1	1541.362858	1565.641242	24.278384	3
301	1	1919.546272	1949.341015	29.794742	1	247	1	1534.314064	1558.474329	24.160265	1
300	1	1912.495230	1942.106775	29.611545	1	246	1	1527.275854	1551.250719	23.974865	1
299	1	1905.444212	1934.872520	29.428308	1	245	1	1520.238095	1544.027626	23.789532	1

Table 24: Results from MIF1739: type, initial, minimum, and difference of potential, and Adj(C_{n+1}, C_n) (cont.).

n	T	- E ^{MIF}	- E*	-(E* - E ^{MIF})	Adj	n	T	- E ^{MIF}	- E*	-(E* - E ^{MIF})	Adj
244	1	1512.956517	1536.882829	23.926312	13	190	2	1133.097035	1161.301939	28.204904	1
243	1	1505.908421	1529.712151	23.803729	1	189	2	1125.783551	1153.637019	27.853468	5
242	1	1499.076971	1522.723264	23.646293	7	188	2	1118.572796	1146.439107	27.866311	1
241	1	1492.030024	1515.554577	23.524553	1	187	1	1122.743390	1139.455696	16.712305	201
240	1	1485.202483	1508.562918	23.360435	3	186	1	1116.076450	1132.669966	16.593516	1
239	1	1478.156685	1501.396062	23.239377	1	185	1	1109.046091	1125.493794	16.447704	1
238	2	1458.401342	1494.438248	36.036906	295	184	1	1102.422710	1118.767663	16.344953	9
237	2	1451.355838	1487.236324	35.880485	1	183	1	1096.108775	1112.315227	16.206453	1
236	2	1444.136501	1480.034329	35.897828	1	182	1	1089.796282	1105.863712	16.067431	1
235	1	1450.218429	1473.095365	22.876936	273	181	1	1083.483930	1099.411614	15.927684	1
234	1	1443.173666	1465.923516	22.749850	1	180	1	1076.821821	1092.632624	15.810803	1
233	1	1436.340559	1458.930499	22.589940	3	179	1	1069.792070	1085.454779	15.662709	1
232	1	1429.719290	1452.263306	22.544016	9	178	5	1049.498537	1079.083854	29.585318	63
231	1	1423.401107	1445.811016	22.409909	1	177	5	1043.485944	1072.614798	29.128855	1
230	1	1417.082949	1439.358239	22.275289	1	176	1	1050.356342	1065.678130	15.321788	59
229	1	1410.038740	1432.183492	22.144752	1	175	1	1044.045454	1059.229971	15.184517	1
228	1	1403.205405	1425.193032	21.987627	3	174	1	1037.734707	1052.781192	15.046485	1
227	1	1396.162344	1418.020129	21.857784	1	173	1	1031.426491	1046.334455	14.907964	1
226	1	1389.331708	1411.028063	21.696354	3	172	1	1024.397403	1039.154907	14.757504	1
225	1	1382.289796	1403.856865	21.567068	1	171	1	1017.367075	1031.971855	14.604780	1
224	1	1375.454585	1396.859048	21.404463	3	170	1	1010.339278	1024.791797	14.452518	1
223	1	1368.412800	1389.687271	21.274470	1	169	1	1003.311622	1017.611215	14.299593	1
222	1	1361.581309	1382.690887	21.109578	3	168	5	987.367107	1010.726765	23.359659	51
221	1	1354.539653	1375.518589	20.978936	1	167	5	980.337548	1003.545072	23.207524	1
220	1	1347.500528	1368.349193	20.848665	1	166	5	974.519257	996.549774	22.030517	3
219	1	1340.483272	1361.365568	20.882297	17	165	5	967.661743	990.405689	22.743946	5
218	1	1333.443544	1354.192036	20.748493	1	164	5	962.265188	984.111386	21.846198	1
217	1	1326.660286	1347.250525	20.590239	3	163	5	956.868740	977.816007	20.947267	1
216	1	1320.158515	1340.711237	20.552723	7	162	5	949.839467	970.632016	20.792550	1
215	1	1313.840756	1334.258220	20.417464	1	161	5	944.656735	963.733556	19.076822	3
214	1	1307.523043	1327.804472	20.281429	1	160	5	938.062815	957.110858	19.048043	3
213	1	1301.205376	1321.349995	20.144619	1	159	5	931.922786	951.091036	19.168251	3
212	1	1294.166257	1314.173556	20.007300	1	158	5	926.528159	944.793386	18.265227	1
211	1	1287.333727	1307.181286	19.847559	3	157	5	921.133763	938.494113	17.360350	1
210	1	1280.295756	1300.006412	19.710656	1	156	5	914.105430	931.307705	17.202274	1
209	1	1273.462409	1293.010784	19.548374	3	155	5	908.957589	924.445646	15.488057	3
208	1	1266.424566	1285.835602	19.411036	1	154	1	905.577353	918.020913	12.443560	15
207	1	1259.591424	1278.838727	19.247303	3	153	5	896.345363	911.707448	15.362085	13
206	1	1252.553709	1271.663247	19.109538	1	152	5	890.961168	905.429627	14.468459	1
205	1	1245.518525	1264.490570	18.972045	1	151	5	885.595913	899.181011	13.585099	1
204	1	1238.485872	1257.320613	18.834742	1	150	1	881.326697	893.310258	11.983560	7
203	1	1231.456102	1250.106610	18.650509	1	149	1	874.820750	886.693405	11.872655	1
202	1	1224.618358	1243.298618	18.680260	15	148	1	869.308904	881.072971	11.764067	1
201	1	1217.583720	1236.124256	18.540537	1	147	1	864.791158	876.461207	11.670049	1
200	1	1210.801268	1229.184776	18.383508	3	146	1	857.763396	869.272573	11.509177	1
199	1	1204.292347	1222.627677	18.335330	7	145	1	850.738164	862.087012	11.348849	1
198	1	1197.979031	1216.176003	18.196973	1	144	1	843.715463	854.904499	11.189036	1
197	1	1191.663252	1209.721287	18.058035	1	143	1	836.692904	847.721698	11.028794	1
196	1	1185.350005	1203.268658	17.918653	1	142	1	829.670485	840.538610	10.868125	1
195	1	1178.315975	1196.092140	17.776166	1	141	1	822.650598	833.358586	10.707987	1
194	1	1171.480383	1189.094682	17.614298	3	140	1	815.628375	826.174676	10.546302	1
193	1	1164.446481	1181.917924	17.471443	1	139	1	808.608682	818.993848	10.385166	1
192	2	1147.357058	1175.697144	28.340086	211	138	1	801.589131	811.812780	10.223649	1
191	2	1140.313601	1168.499654	28.186052	1	137	1	794.569721	804.631473	10.061752	1

Table 25: Results from MIF1739: type, initial, minimum, and difference of potential, and Adj(C_{n+1}, C_n) (cont.).

n	T	- E ^{MIF}	- E*	-(E* - E ^{MIF})	Adj	n	T	- E ^{MIF}	- E*	-(E* - E ^{MIF})	Adj
136	1	787.552841	797.453259	9.900418	1	82	1	435.141809	440.550425	5.408616	1
135	1	780.538494	790.278120	9.739626	1	81	5	418.751871	434.343643	15.591772	49
134	1	771.888084	782.206157	10.318073	13	80	5	413.174252	428.083564	14.909313	1
133	1	764.872103	775.023203	10.151101	1	79	5	407.599164	421.810897	14.211734	1
132	1	757.624997	768.042203	10.417206	7	78	5	400.623898	414.794401	14.170503	1
131	1	752.079580	762.441558	10.361978	1	77	2	399.485644	409.083517	9.597873	109
130	1	745.074713	755.271073	10.196360	1	76	2	393.350121	402.894866	9.544745	1
129	1	738.279709	748.460647	10.180939	3	75	2	388.190437	397.492331	9.301894	1
128	1	731.308859	741.332100	10.023241	1	74	5	378.446458	390.908500	12.462042	101
127	1	724.482803	734.479629	9.996826	3	73	5	373.082314	384.789377	11.707063	1
126	1	717.512263	727.349853	9.837590	1	72	5	364.499634	378.637253	14.137620	3
125	1	711.424362	721.303235	9.878873	7	71	5	362.311459	373.349661	11.038202	1
124	1	705.142336	714.920896	9.778560	1	70	5	356.747752	366.892251	10.144500	1
123	1	698.182341	707.802109	9.619768	1	69	5	349.799241	359.882566	10.083325	1
122	1	691.352363	700.939379	9.587016	3	68	5	344.492689	353.394542	8.901853	5
121	1	684.392677	693.819577	9.426900	1	67	5	338.297850	347.252007	8.954157	3
120	1	677.617362	687.021982	9.404619	5	66	5	332.929651	341.110599	8.180948	1
119	1	672.090051	681.419158	9.329107	1	65	5	327.471672	334.971532	7.499860	5
118	1	665.537834	674.769635	9.231801	1	64	5	322.181399	329.620147	7.438749	3
117	1	659.162875	668.282701	9.119826	1	63	5	316.828430	323.489734	6.661304	1
116	1	653.782018	662.809353	9.027335	1	62	5	311.476582	317.353901	5.877319	1
115	1	646.746131	655.756307	9.010175	1	61	5	306.189880	312.008896	5.819016	3
114	1	640.000618	648.833100	8.832482	3	60	5	300.845135	305.875476	5.030340	1
113	1	632.971571	641.794704	8.823133	1	59	5	295.504198	299.738070	4.233872	1
112	1	626.255287	634.874626	8.619339	3	58	5	290.323295	294.378148	4.054853	3
111	1	619.538575	628.068416	8.529841	1	57	5	285.036337	288.342625	3.306288	1
110	1	613.318206	621.788224	8.470018	5	56	1	281.080918	283.643105	2.562187	3
109	1	607.045416	615.411166	8.365751	1	55	1	276.790160	279.248470	2.458311	1
108	1	600.773449	609.033011	8.259562	1	54	1	269.848550	272.208631	2.360081	1
107	1	593.759216	602.007110	8.247895	1	53	1	262.935582	265.203016	2.267435	1
106	1	587.033279	595.061072	8.027793	3	52	1	256.051255	258.229991	2.178736	1
105	1	580.334412	588.266501	7.932089	1	51	1	249.168536	251.253964	2.085428	1
104	2	568.508947	582.086642	13.577695	143	50	1	242.200014	244.549926	2.349912	3
103	2	562.265046	575.766131	13.501085	131	49	1	236.765545	239.091864	2.326319	1
102	2	556.100851	569.363652	13.262801	1	48	1	229.965239	232.199529	2.234290	1
101	1	555.880448	563.411308	7.530860	109	47	1	223.683123	226.012256	2.329133	1
100	1	549.614026	557.039820	7.425793	1	46	1	218.395108	220.680330	2.285222	1
99	1	543.347746	550.666526	7.318780	1	45	1	211.606180	213.784862	2.178682	1
98	5	459.466678	543.665361	84.198682	61	44	1	205.444733	207.688728	2.243995	1
97	1	529.610737	536.681383	7.070646	59	43	1	200.177436	202.364664	2.187228	1
96	1	522.915049	529.879146	6.964098	1	42	1	194.121809	196.277534	2.155724	1
95	1	516.759218	523.640211	6.880994	9	41	1	188.430439	190.536277	2.105838	1
94	1	510.493659	517.264131	6.770472	1	40	1	183.215073	185.249839	2.034766	1
93	1	504.224814	510.877688	6.652874	7	39	1	178.099956	180.033185	1.933230	1
92	1	498.630804	505.185309	6.554505	5	38	3	169.861663	173.928427	4.066764	77
91	1	492.365755	498.811060	6.445305	1	37	1	165.169257	167.033672	1.864415	75
90	1	486.101025	492.433908	6.332883	1	36	1	160.061341	161.825363	1.764021	1
89	1	479.836615	486.053911	6.217295	1	35	1	154.037442	155.756643	1.719202	1
88	1	472.858084	479.032630	6.174546	1	34	1	148.378752	150.044528	1.665777	3
87	1	466.141613	472.098165	5.956551	3	33	1	143.278037	144.842719	1.564682	1
86	1	459.520844	465.384493	5.863650	7	32	1	138.178929	139.635524	1.456595	1
85	5	442.461794	459.055799	16.594005	61	31	1	132.177919	133.586422	1.408503	1
84	1	447.029435	452.657214	5.627779	59	30	5	122.189006	128.286571	6.097565	29
83	1	441.399403	446.924094	5.524692	5	29	5	117.754574	123.587371	5.832797	5

Table 26: Results from MIF1739: type, initial, minimum, and difference of potential, and Adj(C_{n+1}, C_n) (cont.).

n	T	- E ^{MIF}	- E*	-(E* -E ^{MIF})	Adj
28	5	111.743771	117.822402	6.078631	1
27	5	107.676832	112.873584	5.196752	1
26	5	103.329759	108.315616	4.985858	5
25	5	97.407732	102.372663	4.964931	1
24	5	93.391233	97.348815	3.957582	1
23	5	88.925087	92.844472	3.919385	1
22	5	84.331772	86.809782	2.478011	1
21	5	79.125778	81.684571	2.558793	1
20	5	74.676835	77.177043	2.500207	1
19	5	70.292142	72.659782	2.367641	1
18	5	65.765646	66.530949	0.765303	1
17	5	60.528902	61.317995	0.789092	3
16	5	56.232985	56.815742	0.582756	1
15	5	51.945217	52.322627	0.377411	1
14	5	47.721697	47.845157	0.123460	1
13	1	44.326801	44.326801	0.000000	1
12	1	37.877723	37.967600	0.089876	1
11	1	32.422747	32.765970	0.343224	1
10	1	27.961871	28.422532	0.460661	1
9	1	23.601244	24.113360	0.512117	1
8	1	19.340866	19.821489	0.480623	1
7	1	16.074589	16.505384	0.430795	1
6	5	9.257755	12.712062	3.454307	5
5	1	8.825643	9.103852	0.278209	3
4	1	5.798470	6.000000	0.201530	1
3	1	2.982303	3.000000	0.017697	1
2	1	0.994101	1.000000	0.005899	1

Max	0.005899	1201
Avrg	63.283163	17
Min	146.911491	1

Table 27: Results from MIF1739: type, initial, minimum, and difference of potential, and Adj(C_{n+1}, C_n) (cont.).

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
1000	2 3 4 5 6 7	/ 0	1000	262 263 264		1000	541 542 543	
	8 9 10 11 12			265 266 267			544 545 546	
	13 14 15 16			268 269 270			547 548 549	
	17 18 19 20			271 272 273			550 551 552	
	21 22 23 24			274 275 276			553 554 555	
	25 26 27 28			277 278 279			556 557 558	
	29 30 31 32			280 281 282			559 560 561	
	33 34 35 36			283 284 285			562 563 564	
	37 38 39 40			286 287 288			565 566 567	
	41 42 43 44			289 290 291			568 569 570	
	45 46 47 48			292 293 294			571 572 573	
	49 50 51 52			295 296 297			574 575 576	
	53 54 55 76			298 299 300			577 578 579	
	77 78 79 80			301 302 303			580 581 582	
	81 82 83 84			304 305 306			583 584 585	
	85 86 87 88			307 308 309			586 587 588	
	89 90 91 92			310 311 312			589 590 591	
	93 94 95 96			313 314 315			592 593 594	
	97 98 99 100			316 317 318			595 596 597	
	101 102 103			319 320 321			598 599 600	
	104 105 106			322 323 324			601 602 603	
	107 108 109			325 326 327			604 605 606	
	110 111 112			328 329 330			607 608 609	
	113 114 115			331 332 333			610 611 612	
	116 117 118			334 335 336			613 614 615	
	119 120 121			337 338 339			616 617 618	
	122 123 124			340 341 342			619 620 621	
	125 126 127			343 344 345			622 623 624	
	128 129 130			346 347 348			625 626 627	
	131 132 133			349 350 351			628 629 630	
	134 135 136			352 353 354			631 632 633	
	137 138 139			355 356 357			634 635 636	
	140 141 142			358 359 360			637 638 639	
	143 144 145			361 362 363			640 641 642	
	146 147 148			364 365 366			643 644 645	
	149 150 151			367 368 369			646 647 648	
	152 153 154			370 371 372			649 650 651	
	155 156 157			373 374 375			652 653 654	
	158 159 160			376 377 378			655 656 657	
	161 162 163			379 380 381			658 659 660	
	164 165 166			382 383 384			661 662 663	
	167 228 229			385 386 387			664 665 666	
	230 231 232			388 389 510			667 668 669	
	233 234 235			511 512 513			670 671 672	
	236 237 238			514 515 516			673 674 675	
	239 240 241			517 518 519			676 677 678	
	242 243 244			520 521 522			679 680 681	
	245 246 247			523 524 525			682 683 684	
	248 249 250			526 527 528			685 686 687	
	251 252 253			529 530 531			688 689 690	
	254 255 256			532 533 534			691 692 693	
	257 258 259			535 536 537			694 695 696	
	260 261			538 539 540			697 698 699	

Table 28: i_p of the particles in MIF1739, to build C_n from C_{n+1} .

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
1000	700 701 702		1000	1040 1041		1000	1149 1150	
	703 704 705			1042 1043			1151 1152	
	706 707 708			1045 1046			1153 1154	
	709 710 711			1047 1048			1155 1156	
	712 713 714			1049 1050			1157 1158	
	715 716 717			1051 1052			1159 1160	
	718 719 720			1053 1054			1161 1162	
	721 722 723			1055 1057			1163 1164	
	724 725 726			1058 1059			1165 1166	
	727 728 729			1060 1061			1167 1168	
	730 731 732			1063 1064			1169 1170	
	733 734 735			1065 1066			1171 1172	
	736 737 738			1067 1068			1173 1174	
	739 740 741			1069 1070			1175 1176	
	742 743 744			1071 1072			1177 1178	
	745 746 747			1073 1074			1179 1180	
	748 749 750			1075 1076			1181 1182	
	751 752 753			1077 1078			1183 1184	
	754 755 756			1079 1080			1185 1186	
	757 758 759			1081 1082			1187 1188	
	760 761 962			1083 1084			1189 1190	
	963 964 965			1085 1086			1191 1192	
	966 967 968			1087 1088			1193 1194	
	969 970 971			1089 1090			1195 1196	
	972 973 974			1091 1092			1197 1198	
	975 976 977			1093 1094			1199 1200	
	978 979 980			1095 1096			1201 1202	
	981 982 983			1097 1098			1203 1204	
	984 985 986			1099 1100			1205 1206	
	987 988 989			1101 1102			1207 1208	
	990 991 992			1103 1104			1209 1210	
	993 994 995			1105 1106			1211 1212	
	996 997 998			1107 1108			1213 1214	
	999 1000			1109 1110			1215 1216	
	1001 1002			1111 1112			1217 1219	
	1003 1004			1113 1114			1220 1221	
	1005 1006			1115 1116			1222 1223	
	1007 1008			1117 1118			1225 1226	
	1009 1010			1119 1120			1227 1228	
	1011 1012			1121 1122			1229 1231	
	1013 1014			1123 1124			1232 1233	
	1015 1016			1125 1126			1234 1235	
	1017 1018			1127 1128			1237 1238	
	1019 1020			1129 1130			1239 1240	
	1021 1022			1131 1132			1241 1243	
	1023 1024			1133 1134			1244 1245	
	1025 1026			1135 1136			1246 1247	
	1027 1028			1137 1138			1248 1249	
	1029 1030			1139 1140			1250 1251	
	1031 1032			1141 1142			1252 1253	
	1033 1034			1143 1144			1254 1255	
	1035 1036			1145 1146			1256 1257	
	1037 1039			1147 1148			1258 1259	

Table 29: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
1000	1260	1261	1000	1668	1669	985	1818 1850	1674 1677
	1262	1263		1670	1671		1851 1852	1678 1679
	1264	1265		1672	1673		1885 1886 /	1696 1697
	1266	1267		1674	1676		30	1698 / 31
	1268	1269		1677	1678	984	/ 0	1062 / 1
	1270	1271		1679	1681	983	/ 0	1044 / 1
	1272	1273		1682	1683	982	/ 0	1230 / 1
	1274	1275		1684	1685	981	1062 / 1	1885 1886 /
	1276	1277		1686	1687			2
	1278	1279		1688	1689	980	/ 0	1062 / 1
	1280	1281		1691	1692	979	1230 1885	1681 1694
	1282	1283		1693	1694		1886 / 3	1708 1722 /
	1284	1285		1696	1697			4
	1286	1287		1698	1699	978	/ 0	1230 / 1
	1288	1289		1702	1703	977	1062 / 1	1885 1886 /
	1290	1291		1704	1708			2
	1292	1293		1709	1710	976	/ 0	1062 / 1
	1294	1295		1711	1713	975	/ 0	1637 / 1
	1296	1297		1714	1715	974	1885 1886 /	1636 1651
	1298	1299		1716	1720		2	1670 / 3
	1300	1301		1721	1722	973	1636 1637	1633 1644
	1302	1303		1726	1727		1651 1670 /	1660 1885
	1304	1305		1728 / 1000			4	1886 / 5
	1306	1307	999	/ 0	1050 / 1	972	1038 1044	1056 1634
	1308	1309	998	1056 1062 /	1685 1711		1062 1218	1635 1636
	1310	1311		2	1713 / 3		1224 1230	1637 1645
	1312	1313	997	/ 0	1056 / 1		1236 1242	1646 1647
	1314	1315	996	/ 0	1062 / 1		1323 1840	1648 1649
	1316	1317	995	/ 0	1726 / 1		1841 1874	1650 1651
	1318	1319	994	1050 / 1	1727 1728 /		1875 1876	1661 1662
	1320	1321			2		1908 1909	1663 1664
	1322	1625	993	/ 0	1050 / 1		1910 1911	1665 1666
	1626	1627	992	/ 0	1702 / 1		1942 1943	1667 1668
	1628	1629	991	1050 / 1	1703 1704 /		1944 1945	1669 1670
	1630	1631			2		1946 1977	1682 1683
	1632	1633	990	/ 0	1050 / 1		1978 1979	1684 1685
	1634	1635	989	/ 0	1722 / 1		1980 2011	1686 1687
	1636	1637	988	1050 1722 /	1655 1676		2012 2013	1688 1689
	1638	1639		2	1699 / 3		2014 2015	1690 1691
	1640	1641	987	/ 0	1050 / 1		2036 2037	1692 1693
	1642	1643	986	/ 0	1708 / 1		2038 2039	1709 1710
	1644	1645	985	1044 1050	1625 1626		2040 2041	1711 1713
	1646	1647		1056 1062	1627 1628		2042 2043	1714 1715
	1648	1649		1230 1685	1629 1630		2044 2061	1716 1717
	1650	1651		1690 1708	1631 1632		2062 2063	1719 1720
	1652	1653		1711 1713	1638 1639		2064 2065	1721 1746
	1654	1655		1717 1719	1640 1641		2066 2067	1747 1748
	1656	1657		1746 1747	1642 1643		2068 2082	1749 1780
	1658	1659		1748 1749	1652 1653		2083 2084	1781 1782
	1660	1661		1780 1781	1654 1656		2085 2086	1783 1784
	1662	1663		1782 1783	1657 1658		2087 2098	1815 1816
	1664	1665		1784 1815	1659 1671		2099 2100	1817 1818
	1666 1667			1816 1817	1672 1673		2101 2109 /	1850 1851
							60	

Table 30: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
972		1852 / 61	954	1746 1780 /	1670 1694	923	1062 1218	1816 1817
971	/ 0	1062 / 1		4	1722 / 5		1224 1236	1818 1850
970	/ 0	962 / 1	953	962 1038	1649 1650		1242 1323 /	1851 1852
969	/ 0	1050 / 1		1044 1062	1667 1668		11	1885 1886 /
968	/ 0	1236 / 1		1218 1224	1669 1690			12
967	/ 0	1230 / 1		1230 1236	1691 1692	922	/ 0	1 / 1
966	/ 0	1038 / 1		1323 1885	1693 1719	921	/ 0	1323 / 1
965	/ 0	1242 / 1		1886 / 11	1720 1721 /	920	/ 0	1218 / 1
964	/ 0	1044 / 1			12	919	/ 0	1224 / 1
963	962 1050	1218 1224	952	/ 0	1218 / 1	918	/ 0	1230 / 1
	1056 1062	1323 1840	951	/ 0	1038 / 1	917	/ 0	1050 / 1
	1635 1636	1841 1874	950	/ 0	1323 / 1	916	/ 0	1044 / 1
	1637 1647	1875 1876	949	/ 0	1236 / 1	915	/ 0	1242 / 1
	1648 1649	1908 1909	948	/ 0	1062 / 1	914	/ 0	1038 / 1
	1650 1651	1910 1911	947	/ 0	1044 / 1	913	/ 0	1236 / 1
	1664 1665	1942 1943	946	/ 0	1224 / 1	912	/ 0	1056 / 1
	1666 1667	1944 1945	945	/ 0	1230 / 1	911	/ 0	1062 / 1
	1668 1669	1946 1977	944	/ 0	962 / 1	910	/ 0	962 / 1
	1670 1686	1978 1979	943	1230 / 1	1647 1648 /	909	/ 0	1195 / 1
	1687 1688	1980 2011			2	908	/ 0	1225 / 1
	1689 1690	2012 2013	942	/ 0	1230 / 1	907	/ 0	1194 / 1
	1691 1692	2014 2015	941	1647 1648 /	1713 1746	906	1062 / 1	1223 1253 /
	1693 1694	2036 2037		2	1780 / 3			2
	1713 1714	2038 2039	940	1713 1746	1647 1648	905	/ 0	1062 / 1
	1715 1716	2040 2041		1780 / 3	1885 1886 /	904	/ 0	1219 / 1
	1717 1719	2042 2043			4	903	/ 0	1248 / 1
	1720 1721	2044 2061	939	1647 1648 /	1717 1749	902	/ 0	1189 / 1
	1722 1746	2062 2063		2	1784 / 3	901	1062 / 1	1188 1247 /
	1747 1748	2064 2065	938	/ 0	1056 / 1			2
	1749 1780	2066 2067	937	1056 / 1	1647 1648 /	900	/ 0	1062 / 1
	1781 1782	2068 2082			2	899	/ 0	1073 / 1
	1783 1784	2083 2084	936	/ 0	1056 / 1	898	/ 0	1074 / 1
	1815 1816	2085 2086	935	1885 1886 /	1713 1746	897	/ 0	1045 / 1
	1817 1818	2087 2098		2	1780 / 3	896	1062 / 1	1018 1043 /
	1850 1851	2099 2100	934	962 1038	1664 1665			2
	1852 / 53	2101 2109 /		1044 1056	1666 1686	895	/ 0	1062 / 1
		54		1062 1218	1687 1688	894	/ 0	1068 / 1
962	/ 0	1062 / 1		1224 1230	1689 1714	893	/ 0	1039 / 1
961	1885 1886 /	1713 1746		1236 1242	1715 1716	892	/ 0	1097 / 1
	2	1780 / 3		1323 / 11	1747 1748 /	891	1236 / 1	1013 1067 /
960	1713 1746	1694 1722			12			2
	1780 / 3	1885 1886 /	933	/ 0	1218 / 1	890	/ 0	1236 / 1
		4	932	/ 0	1242 / 1	889	/ 0	1042 / 1
959	1885 1886 /	1635 1636	931	/ 0	1038 / 1	888	1042 / 1	963 964 / 2
	2	1637 / 3	930	/ 0	1323 / 1	887	/ 0	965 / 1
958	/ 0	962 / 1	929	/ 0	1062 / 1	886	1236 / 1	966 967 / 2
957	962 / 1	1885 1886 /	928	/ 0	1044 / 1	885	/ 0	1236 / 1
		2	927	/ 0	1224 / 1	884	/ 0	997 / 1
956	/ 0	962 / 1	926	/ 0	962 / 1	883	965 966 967	968 969 970
955	962 1694	1050 1713	925	/ 0	1236 / 1		1067 1068	978 979 980
	1722 / 3	1746 1780 /	924	/ 0	1056 / 1		1097 1188	981 993 994
		4	923	1 962 1038	1781 1782		1189 1194	995 996 1014
954	1050 1713	962 1651		1044 1056	1783 1815		1195 1219	1015 1016

Table 31: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
883	1223 1225	1017 1040	851	566 1075 / 2	1069 1070	825		1127 / 5
	1236 1247	1041 1042 /			1071 / 3	824	1037 1066	510 973 974
	1248 1253 /	18	850	1069 1070	1075 1102		1096 1126	975 976 977
	17			1071 / 3	1103 1104 /	823	1127 / 5	/ 6
882	/ 0	1236 / 1	849	/ 0	566 / 1	510 962 963	8 9 10 11 12	
881	1236 1323 /	965 966 967	848	/ 0	1069 / 1	964 965 966	13 30 31 32	
	2	/ 3	847	566 / 1	1070 1071 /	967 968 969	33 34 35 36	
880	/ 0	1323 / 1			2	970 971 972	37 38 39 40	
879	/ 0	1236 / 1	846	1069 1070	566 1076	973 974 975	41 42 43 44	
878	1230 1323 /	1067 1068		1071 / 3	1077 1078 /	976 977 978	45 46 47 48	
	2	1097 / 3	845		4	979 980 981	49 50 51 52	
877	/ 0	1230 / 1		1076 1077	1069 1070	982 983 984	53 54 55 107	
876	/ 0	1323 / 1		1078 / 3	1071 1098 /	993 994 995	108 109 110	
875	/ 0	1069 / 1	844		4	996 997 998	111 112 113	
874	/ 0	1098 / 1		1069 1070	973 974 975	999 1000	114 115 116	
873	/ 0	1072 / 1		1071 1098 /	976 977 / 5	1001 1013	117 118 119	
872	1098 / 1	1070 1071 /	843		4	1014 1015	120 121 122	
		2		/ 0	510 / 1	1016 1017	123 124 125	
871	/ 0	1102 / 1	842	510 973 974	1069 1070	1018 1019	126 127 128	
870	/ 0	1098 / 1		975 976 977	1071 1076	1020 1021	129 130 131	
869	/ 0	1019 / 1		/ 6	1077 1078	1022 1023	132 133 134	
868	1069 1070	566 1046	841		1098 / 7	1039 1040	135 136 137	
	1071 1098 /	1075 1103		566 1051	1099 1100	1041 1042	138 139 140	
	4	1104 / 5		1075 1076	1101 1128	1046 1047	141 142 143	
867	566 1075	971 982 998		1077 1078	1129 1130	1048 1067	144 145 146	
	1102 1103	1069 1070		1079 1080	1131 1158	1624 1625	147 148 149	
	1104 / 5	1071 / 6		1103 1104	1159 1160	1626 1627	150 151 152	
866	971 982 998	1075 1102		1236 / 11	1188 1189 /	1628 1629	153 154 155	
	/ 3	1103 1104 /	840		12	1630 1631	156 157 158	
		4		/ 0	1236 / 1	1632 1633	159 160 161	
865	1069 1070	566 971 982	839	1236 1323 /	1051 1079	1634 1635	162 163 164	
	1071 / 3	998 / 4		2	1080 / 3	1636 1637	165 166 167	
864	/ 0	972 / 1	838	1051 1079	1219 1247	1638 1639	279 280 281	
863	566 1067	983 984 999		1080 / 3	1248 1323 /	1640 1641	282 283 284	
	1068 1072	1000 1001			4	1642 1643	285 286 287	
	1075 1097	1020 1021	837	/ 0	1236 / 1	1644 1645	288 289 290	
	1102 1103	1022 1023		1236 1323 /	1051 1079	1646 1647	291 292 293	
	1104 1236	1047 1048	836	2	1080 / 3	1648 1649	294 295 296	
	1323 / 11	1049 / 12		/ 0	1323 / 1	1650 1651	297 298 299	
862	/ 0	1323 / 1	835	/ 0	1236 / 1	1652 1653	300 301 302	
861	/ 0	1236 / 1	834	/ 0	1236 / 1	1654 1655	303 304 305	
860	1236 1323 /	1051 1079	833	/ 0	566 / 1	1656 1657	306 307 308	
	2	1080 / 3	832	566 1236 / 2	1075 1103	1658 1659	309 310 311	
859	/ 0	1323 / 1			1104 / 3	1660 1661	312 313 314	
858	/ 0	1236 / 1	831	/ 0	1236 / 1	1662 1663	315 316 317	
857	1236 1323 /	1067 1068	830	/ 0	566 / 1	1664 1665	318 319 320	
	2	1097 / 3	829	/ 0	1217 / 1	1666 1667	321 322 323	
856	/ 0	1236 / 1	828	566 1217 / 2	1076 1077	1668 1669	324 325 326	
855	/ 0	1323 / 1			1078 / 3	1670 1671	327 328 329	
854	/ 0	1037 / 1	827	/ 0	566 / 1	1672 1673	330 331 332	
853	1037 / 1	1072 1102 /	826	/ 0	1108 / 1	1674 1675	333 334 335	
		2	825	1076 1077	1037 1066	1676 1677	336 337 338	
852	1102 / 1	566 1075 / 2		1078 1108 /	1096 1126	1678 1679	339 340 341	
				4				

Table 32: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T		
823	1680	1681	342	343	344	823	3784	3785	1152	1153
	1682	1683	345	346	347		3786	3787	1154	1155
	1684	1685	348	349	350		3788	3789	1156	1157
	1686	1687	351	352	353		3790	3791	1161	1162
	1688	1689	354	355	356		3792	3793	1163	1164
	1690	1691	357	358	359		3794	3795	1165	1166
	1692	1693	360	361	362		3796	3797	1167	1168
	1694	1695	363	364	365		3798	3799	1169	1170
	1696	1697	366	367	368		3800	3801	1171	1172
	1698	1699	369	370	371		3802	3803	1173	1174
	1701	1702	372	373	374		3804	3805	1175	1176
	1703	1704	375	376	377		3806	3807	1177	1178
	1705	1707	378	379	380		3808	3809	1179	1180
	1708	1709	381	382	383		3810	3811	1181	1182
	1710	1711	384	385	386		3812	3813	1183	1184
	1713	1714	387	388	389		3815	3816	1185	1186
	1715	1716	571	586	587		3817	3818	1187	1190
	1717	1719	588	589	590		3819	3821	1191	1192
	1720	1721	591	592	593		3822	3823	1193	1194
	1722	1723	594	595	596		3824	3825	1195	1196
	1724	1725	597	598	599		3827	3828	1197	1198
	1726	1727	600	601	602		3829	3830	1199	1200
	1728	1729	603	604	605		3831	3833	1201	1202
	1753	1754	606	607	608		3834	3835	1203	1204
	1755	1756	609	610	611		3836	3837	1205	1206
	1760	1761	612	613	614		3838	3839	1207	1208
	1762	1763	615	616	617		3840	3841	1209	1210
	2536	2537	618	619	620		3842	3843	1211	1212
	2538	2539	621	622	623		3867	3868	1213	1214
	2540	2541	624	625	626		3869	3870	1215	1216
	2542	2543	627	628	629		3871	3873	1217	1220
	2544	2545	630	631	632		3874	3875	1221	1222
	2546	2547	633	634	635		3876	3877	1223	1225
	2548	2549	636	637	638		5270	5271	1226	1227
	2550	2551	639	640	641		5272	5273	1228	1229
	2552	2553	642	643	644		5274	5275	1231	1232
	2554	2555	645	646	647		5276	5277	1233	1234
	2556	2557	648	649	650		5278	5279	1235	1237
	2558	2559	651	652	653		5280	5281	1238	1239
	2560	2561	654	655	656		5282	5283	1240	1241
	2562	2563	657	658	659		5284	5285	1243	1244
	2564	2565	660	661	662		5286	5287	1245	1246
	2566	2567	663	664	665		5288	5289	1249	1250
	2568	2569	666	667	668		5290	5291	1251	1252
	2570	2571	669	670	671		5292	5293	1253	1254
	2572	2573	672	673	674		5294	5295	1255	1256
	2574	2575	675	676	677		5296	5297	1257	1258
	2576	2577	678	679	680		5298	5299	1259	1260
	2578	2579	681	682	683		5300	5301	1261	1262
	2580	2581	684	685	686		5302	5303	1263	1264
	2582	2583	687	688	689		5304	5305	1265	1266
	2584	2585	690	691	692		5306	5307	1267	1268
	2586	2587	693	694	695		5308	5309	1269	1270

Table 33: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
823	5310 5311	1271 1272	823	7207 7208		817	53 54 55 107	1637 1638
	5312 5313	1273 1274		7209 7210			108 109 110	1639 1640
	5314 5315	1275 1276		7211 7212			111 112 113	1641 1642
	5316 5317	1277 1278		7213 7214			114 115 116	1643 1644
	5318 5319	1279 1280		7215 7216			117 118 119	1645 1646
	5320 5321	1281 1282		7217 7218			120 121 122	1647 1648
	5322 5323	1283 1284		7219 7220			123 124 125	1649 1650
	5324 5325	1285 1286		7221 7222			126 127 128	1651 1652
	5326 5327	1287 1288		7223 7224			129 130 131	1653 1654
	5328 5329	1289 1290		7225 7226			132 133 134	1655 1656
	5330 5331	1291 1292		7227 7229			135 136 137	1657 1658
	5332 5333	1293 1294		7230 7231			138 139 140	1659 1660
	5334 5335	1295 1296		7232 7234			141 142 143	1661 1662
	5336 5337	1297 1298		7235 7236			144 145 146	1663 1664
	5338 5339	1299 1300		7237 7238			147 148 149	1665 1666
	5340 5341	1301 1302		7239 7240			150 151 152	1667 1668
	5342 5343	1303 1304		7241 7242			153 154 155	1669 1670
	5344 5345	1305 1306		7243 7244			156 157 158	1671 1672
	5347 5348	1307 1308		7245 7246			159 160 161	1673 1674
	5349 5350	1309 1310		7247 7249			162 163 164	1675 1676
	5351 5353	1311 1312		7250 7251			165 166 167	1677 1678
	5354 5355	1313 1314		7252 7256			279 280 281	1679 1680
	5356 5357	1315 1316		7257 7258			282 283 284	1681 1682
	5359 5360	1317 1318		7262 7263			285 286 287	1683 1684
	5361 5362	1319 1320		7264 7265			288 289 290	1685 1686
	5363 5365	1321 1322 /		7267 7268			291 292 293	1687 1688
	5366 5367	601		7269 7270			294 295 296	1689 1690
	5368 5369			7271 7273			297 298 299	1691 1692
	5370 5371			7274 7275			300 301 302	1693 1694
	5372 5373			7276 7277			303 304 305	1695 1696
	5374 5375			7301 7302			306 307 308	1697 1698
	5399 5400			7303 7304			309 310 311	1699 1701
	5401 5402			7308 7309			312 313 314	1702 1703
	5403 5405			7310 7311 /			315 316 317	1704 1705
	5406 5407			600			318 319 320	1707 1708
	5408 5409		822	/ 0	1753 / 1		321 322 323	1709 1710
	7173 7174		821	1753 / 1	1763 7301 /		324 325 326	1711 1713
	7175 7176				2		327 328 329	1714 1715
	7177 7178		820	1763 7172 /	7238 7265		330 331 332	1716 1717
	7179 7180			2	7267 / 3		333 334 335	1719 1720
	7181 7182		819	7238 7265	561 1039		336 337 338	1721 1722
	7183 7184			7267 7301 /	1067 1763		339 340 341	1723 1724
	7185 7186			4	7172 / 5		342 343 344	1725 1726
	7187 7188		818	561 1039	7238 7265		345 346 347	1727 1728
	7189 7190			1067 / 3	7267 7301 /		348 349 350	1729 1753
	7191 7192				4		351 352 353	1754 1755
	7193 7194		817	8 9 10 11 12	962 1624		354 355 356	1756 1760
	7195 7196			13 30 31 32	1625 1626		357 358 359	1761 1762
	7197 7198			33 34 35 36	1627 1628		360 361 362	2536 2537
	7199 7200			37 38 39 40	1629 1630		363 364 365	2538 2539
	7201 7202			41 42 43 44	1631 1632		366 367 368	2540 2541
	7203 7204			45 46 47 48	1633 1634		369 370 371	2542 2543
	7205 7206			49 50 51 52	1635 1636		372 373 374	2544 2545

Table 34: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
817	375 376 377	2546 2547	817	729 730 731	3742 3743	817	1177 1178	3876 3877
	378 379 380	2548 2549		732 733 734	3744 3745		1179 1180	5270 5271
	381 382 383	2550 2551		735 736 737	3746 3747		1181 1182	5272 5273
	384 385 386	2552 2553		738 739 740	3748 3749		1183 1184	5274 5275
	387 388 389	2554 2555		741 742 743	3750 3751		1185 1186	5276 5277
	566 571 586	2556 2557		744 745 746	3752 3753		1187 1188	5278 5279
	587 588 589	2558 2559		747 748 749	3754 3755		1189 1190	5280 5281
	590 591 592	2560 2561		750 751 752	3756 3757		1191 1192	5282 5283
	593 594 595	2562 2563		753 754 755	3758 3759		1193 1208	5284 5285
	596 597 598	2564 2565		756 757 758	3760 3761		1209 1210	5286 5287
	599 600 601	2566 2567		759 760 761	3762 3763		1211 1212	5288 5289
	602 603 604	2568 2569		1043 1045	3764 3765		1213 1214	5290 5291
	605 606 607	2570 2571		1049 1051	3766 3767		1215 1216	5292 5293
	608 609 610	2572 2573		1068 1069	3768 3769		1217 1219	5294 5295
	611 612 613	2574 2575		1070 1071	3770 3771		1220 1221	5296 5297
	614 615 616	2576 2577		1072 1073	3772 3773		1222 1238	5298 5299
	617 618 619	2578 2579		1074 1075	3774 3775		1239 1240	5300 5301
	620 621 622	2580 2581		1076 1077	3776 3777		1241 1243	5302 5303
	623 624 625	2582 2583		1078 1081	3778 3779		1244 1245	5304 5305
	626 627 628	2584 2585		1082 1083	3780 3781		1246 1247	5306 5307
	629 630 631	2586 2587		1084 1087	3782 3783		1248 1249	5308 5309
	632 633 634	2588 2589		1088 1089	3784 3785		1250 1251	5310 5311
	635 636 637	2590 2591		1090 1091	3786 3787		1252 1264	5312 5313
	638 639 640	2592 2593		1092 1093	3788 3789		1265 1266	5314 5315
	641 642 643	2594 2595		1094 1095	3790 3791		1267 1268	5316 5317
	644 645 646	2596 2597		1096 1097	3792 3793		1269 1270	5318 5319
	647 648 649	2598 2599		1098 1099	3794 3795		1271 1272	5320 5321
	650 651 652	2600 2601		1100 1101	3796 3797		1273 1274	5322 5323
	653 654 655	2602 2603		1102 1103	3798 3799		1275 1276	5324 5325
	656 657 658	2604 2605		1104 1105	3800 3801		1286 1287	5326 5327
	659 660 661	2606 2607		1106 1107	3802 3803		1288 1289	5328 5329
	662 663 664	2608 2609		1111 1112	3804 3805		1290 1291	5330 5331
	665 666 667	2610 2611		1113 1117	3806 3807		1292 1293	5332 5333
	668 669 670	2613 2614		1118 1119	3808 3809		1294 1295	5334 5335
	671 672 673	2615 2616		1120 1121	3810 3811		1303 1304	5336 5337
	674 675 676	2617 2619		1122 1123	3812 3813		1305 1306	5338 5339
	677 678 679	2620 2621		1124 1125	3815 3816		1307 1308	5340 5341
	680 681 682	2622 2623		1126 1127	3817 3818		1309 1315	5342 5343
	683 684 685	2625 2626		1128 1129	3819 3821		1316 1317 /	5344 5345
	686 687 688	2627 2628		1130 1131	3822 3823	543		5347 5348
	689 690 691	2629 2631		1132 1133	3824 3825			5349 5350
	692 693 694	2632 2633		1134 1135	3827 3828			5351 5353
	695 697 698	2634 2635		1136 1141	3829 3830			5354 5355
	699 700 701	2636 2637		1142 1147	3831 3833			5356 5357
	702 703 704	2638 2639		1148 1149	3834 3835			5359 5360
	705 706 707	2640 2641		1150 1151	3836 3837			5361 5362
	708 709 710	2665 2666		1152 1153	3838 3839			5363 5365
	711 712 713	2667 2668		1154 1155	3840 3841			5366 5367
	714 715 716	2669 2671		1156 1157	3842 3843			5368 5369
	717 718 719	2672 2673		1158 1159	3867 3868			5370 5371
	720 721 722	2674 2675		1160 1161	3869 3870			5372 5373
	723 724 725	3738 3739		1162 1163	3871 3873			5374 5375
	726 727 728	3740 3741		1164 1165	3874 3875			5399 5400

Table 35: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
817		5401 5402	816	962 1624	8 9 10 11 12	816	1749 1753	354 355 356
		5403 5405		1625 1626	13 30 31 32		1754 1755	357 358 359
		5406 5407		1627 1628	33 34 35 36		2536 2537	360 361 362
		5408 5409		1629 1630	37 38 39 40		2538 2539	363 364 365
		7173 7174		1631 1632	41 42 43 44		2540 2541	366 367 368
		7175 7176		1633 1634	45 46 47 48		2542 2543	369 370 371
		7177 7178		1635 1636	49 50 51 52		2544 2545	372 373 374
		7179 7180		1637 1638	53 54 55 107		2546 2547	375 376 377
		7181 7182		1639 1640	108 109 110		2548 2549	378 379 380
		7183 7184		1641 1642	111 112 113		2550 2551	381 382 383
		7185 7186		1643 1644	114 115 116		2552 2553	384 385 386
		7187 7188		1645 1646	117 118 119		2554 2555	387 388 389
		7189 7190		1647 1648	120 121 122		2556 2557	561 566 581
		7191 7192		1649 1650	123 124 125		2558 2559	586 587 588
		7193 7194		1651 1652	126 127 128		2560 2561	589 590 591
		7195 7196		1653 1654	129 130 131		2562 2563	592 593 594
		7197 7198		1655 1656	132 133 134		2564 2565	595 596 597
		7199 7200		1657 1658	135 136 137		2566 2567	598 599 600
		7201 7202		1659 1660	138 139 140		2568 2569	601 602 603
		7203 7204		1661 1662	141 142 143		2570 2571	604 605 606
		7205 7206		1663 1664	144 145 146		2572 2573	607 608 609
		7207 7208		1665 1666	147 148 149		2574 2575	610 611 612
		7209 7210		1667 1668	150 151 152		2576 2577	613 614 615
		7211 7212		1669 1670	153 154 155		2578 2579	616 617 618
		7213 7214		1671 1672	156 157 158		2580 2581	619 620 621
		7215 7216		1673 1674	159 160 161		2582 2583	622 623 624
		7217 7218		1675 1676	162 163 164		2584 2585	625 626 627
		7219 7220		1677 1678	165 166 167		2586 2587	628 629 630
		7221 7222		1679 1680	279 280 281		2588 2589	631 632 633
		7223 7224		1681 1682	282 283 284		2590 2591	634 635 636
		7225 7226		1683 1684	285 286 287		2592 2593	637 638 639
		7227 7229		1685 1686	288 289 290		2594 2595	640 641 642
		7230 7231		1687 1688	291 292 293		2596 2597	643 644 645
		7232 7234		1689 1690	294 295 296		2598 2599	646 647 648
		7235 7236		1691 1692	297 298 299		2600 2601	649 650 651
		7237 7239		1693 1694	300 301 302		2602 2603	652 653 654
		7240 7241		1695 1696	303 304 305		2604 2605	655 656 657
		7242 7243		1697 1698	306 307 308		2606 2607	658 659 660
		7244 7245		1699 1701	309 310 311		2608 2609	661 662 663
		7246 7247		1702 1703	312 313 314		2610 2611	664 665 666
		7249 7250		1704 1705	315 316 317		2613 2614	667 668 669
		7251 7252		1707 1708	318 319 320		2615 2616	670 671 672
		7256 7257		1709 1710	321 322 323		2617 2619	673 674 675
		7258 7262		1711 1713	324 325 326		2620 2621	676 677 678
		7263 7264		1714 1715	327 328 329		2622 2623	679 680 681
		7268 7269		1716 1717	330 331 332		2625 2626	682 683 684
		7270 7271		1718 1719	333 334 335		2627 2628	685 686 687
		7273 7274		1720 1721	336 337 338		2629 2630	688 689 690
		7275 7276		1722 1723	339 340 341		2631 2632	691 692 693
		7277 7302		1725 1726	342 343 344		2633 2634	694 695 697
		7303 7304		1727 1728	345 346 347		2635 2637	698 699 700
		7308 7309		1729 1746	348 349 350		2638 2639	701 702 703
		7310 7311 /		1747 1748	351 352 353		2640 2641	704 705 706
		544						

Table 36: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
816	2658	2659	707	708	709	816	5363	5364
	2660	2661	710	711	712		5365	5366
	2662	2664	713	714	715		5367	5368
	2665	2666	716	717	718		5369	5371
	2667	2668	719	720	721		5372	5373
	3738	3739	722	723	724		5374	5375
	3740	3741	725	726	727		5392	5393
	3742	3743	728	729	730		5394	5395
	3744	3745	731	732	733		5396	5398
	3746	3747	734	735	736		5399	5400
	3748	3749	737	738	739		5401	5402
	3750	3751	740	741	742		7172	7173
	3752	3753	743	744	745		7174	7175
	3754	3755	746	747	748		7176	7177
	3756	3757	749	750	751		7178	7179
	3758	3759	752	753	754		7180	7181
	3760	3761	755	756	757		7182	7183
	3762	3763	758	759	760		7184	7185
	3764	3765	761	1039			7186	7187
	3766	3767	1043	1045			7188	7189
	3768	3769	1061	1063			7190	7191
	3770	3771	1067	1068			7192	7193
	3772	3773	1069	1070			7194	7195
	3774	3775	1071	1072			7196	7197
	3776	3777	1073	1074			7198	7199
	3778	3779	1075	1076			7200	7201
	3780	3781	1077	1078			7202	7203
	3782	3783	1081	1082			7204	7205
	3784	3785	1083	1084			7206	7207
	3786	3787	1087	1088			7208	7209
	3788	3789	1089	1090			7210	7211
	3790	3791	1091	1092			7212	7213
	3792	3793	1093	1094			7214	7215
	3794	3795	1095	1096			7216	7217
	3796	3797	1097	1098			7218	7219
	3798	3799	1099	1100			7220	7221
	3800	3801	1101	1102			7222	7224
	3802	3803	1103	1104			7225	7226
	3804	3805	1105	1106			7227	7229
	3806	3807	1107	1111			7230	7231
	3808	3809	1112	1113			7232	7234
	3810	3811	1117	1118			7235	7236
	3812	3813	1119	1120			7237	7238
	3815	3816	1121	1122			7239	7240
	3817	3818	1123	1124			7241	7242
	3819	3821	1125	1126			7243	7244
	3822	3823	1127	1128			7245	7246
	3824	3825	1129	1130			7247	7250
	3827	3828	1131	1132			7251	7252
	3829	3830	1133	1134			7256	7257
	3831	3832	1135	1136			7258	7262
	3833	3834	1141	1142			7263	7264
	3835	3836	1147	1148			7265	7267
816	3837	3839	1149	1150				
	3840	3841	1151	1152				
	3842	3843	1153	1154				
	3860	3861	1155	1156				
	3862	3863	1157	1158				
	3864	3866	1159	1160				
	3867	3868	1161	1162				
	3869	3870	1163	1164				
	5270	5271	1165	1177				
	5272	5273	1178	1179				
	5274	5275	1180	1181				
	5276	5277	1182	1183				
	5278	5279	1184	1185				
	5280	5281	1186	1187				
	5282	5283	1188	1189				
	5284	5285	1190	1191				
	5286	5287	1192	1193				
	5288	5289	1208	1209				
	5290	5291	1210	1211				
	5292	5293	1212	1213				
	5294	5295	1214	1215				
	5296	5297	1216	1217				
	5298	5299	1219	1220				
	5300	5301	1221	1222				
	5302	5303	1238	1239				
	5304	5305	1240	1241				
	5306	5307	1243	1244				
	5308	5309	1245	1246				
	5310	5311	1247	1248				
	5312	5313	1249	1250				
	5314	5315	1251	1252				
	5316	5317	1264	1265				
	5318	5319	1266	1267				
	5320	5321	1268	1269				
	5322	5323	1270	1271				
	5324	5325	1272	1273				
	5326	5327	1274	1275				
	5328	5329	1276	1286				
	5330	5331	1287	1288				
	5332	5333	1289	1290				
	5334	5335	1291	1292				
	5336	5337	1293	1294				
	5338	5339	1295	1303				
	5340	5341	1304	1305				
	5342	5343	1306	1307				
	5344	5345	1308	1309				
	5347	5348	1315	1316				
	5349	5350	1317 / 546					
	5351	5353						
	5354	5355						
	5356	5357						
	5359	5360						
	5361	5362						

Table 37: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
816	7268	7269	814	315 316 317	1704 1705	814	667 668 669	2613 2614
	7270	7271		318 319 320	1707 1708		670 671 672	2615 2616
	7273	7274		321 322 323	1709 1710		673 674 675	2617 2619
	7275	7276		324 325 326	1711 1713		676 677 678	2620 2621
	7295	7296		327 328 329	1714 1715		679 680 681	2622 2623
	7297	7301		330 331 332	1716 1717		682 683 684	2625 2626
	7302	7303		333 334 335	1718 1719		685 686 687	2627 2628
	7304 / 545	336 337 338	1720 1721	688 689 690	2629 2630			
815	581	1061	571	1049	339 340 341	1722 1723	691 692 693	2631 2632
	1063	1756	1051	1746	342 343 344	1725 1726	694 695 696	2633 2634
	7233	7259	7172	7243	345 346 347	1727 1728	697 698 699	2635 2637
	7261	7294 /	7271	7273	348 349 350	1729 1747	700 701 702	2638 2639
	8		7304 / 9		351 352 353	1748 1749	703 704 705	2640 2641
814	8 9 10 11 12	962	1624	354 355 356	1753 1754	706 707 708	2658 2659	
	13 30 31 32	1625	1626	357 358 359	1755 1756	709 710 711	2660 2661	
	33 34 35 36	1627	1628	360 361 362	2536 2537	712 713 714	2662 2664	
	37 38 39 40	1629	1630	363 364 365	2538 2539	715 716 717	2665 2666	
	41 42 43 44	1631	1632	366 367 368	2540 2541	718 719 720	2667 2668	
	45 46 47 48	1633	1634	369 370 371	2542 2543	721 722 723	3738 3739	
	49 50 51 52	1635	1636	372 373 374	2544 2545	724 725 726	3740 3741	
	53 54 55 107	1637	1638	375 376 377	2546 2547	727 728 729	3742 3743	
	108 109 110	1639	1640	378 379 380	2548 2549	730 731 732	3744 3745	
	111 112 113	1641	1642	381 382 383	2550 2551	733 734 735	3746 3747	
	114 115 116	1643	1644	384 385 386	2552 2553	736 737 738	3748 3749	
	117 118 119	1645	1646	387 388 389	2554 2555	739 740 741	3750 3751	
	120 121 122	1647	1648	561 566 571	2556 2557	742 743 744	3752 3753	
	123 124 125	1649	1650	586 587 588	2558 2559	745 746 747	3754 3755	
	126 127 128	1651	1652	589 590 591	2560 2561	748 749 750	3756 3757	
	129 130 131	1653	1654	592 593 594	2562 2563	751 752 753	3758 3759	
	132 133 134	1655	1656	595 596 597	2564 2565	754 755 756	3760 3761	
	135 136 137	1657	1658	598 599 600	2566 2567	757 758 759	3762 3763	
	138 139 140	1659	1660	601 602 603	2568 2569	760	1039 3764 3765	
	141 142 143	1661	1662	604 605 606	2570 2571	1043	1045 3766 3767	
	144 145 146	1663	1664	607 608 609	2572 2573	1049	1051 3768 3769	
	147 148 149	1665	1666	610 611 612	2574 2575	1067	1068 3770 3771	
	150 151 152	1667	1668	613 614 615	2576 2577	1069	1070 3772 3773	
	153 154 155	1669	1670	616 617 618	2578 2579	1071	1072 3774 3775	
	156 157 158	1671	1672	619 620 621	2580 2581	1073	1074 3776 3777	
	159 160 161	1673	1674	622 623 624	2582 2583	1075	1076 3778 3779	
	162 163 164	1675	1676	625 626 627	2584 2585	1077	1078 3780 3781	
	165 166 167	1677	1678	628 629 630	2586 2587	1079	1080 3782 3783	
	279 280 281	1679	1680	631 632 633	2588 2589	1081	1082 3784 3785	
	282 283 284	1681	1682	634 635 636	2590 2591	1083	1084 3786 3787	
	285 286 287	1683	1684	637 638 639	2592 2593	1085	1086 3788 3789	
	288 289 290	1685	1686	640 641 642	2594 2595	1087	1088 3790 3791	
	291 292 293	1687	1688	643 644 645	2596 2597	1089	1090 3792 3793	
	294 295 296	1689	1690	646 647 648	2598 2599	1091	1092 3794 3795	
297 298 299	1691	1692	649 650 651	2600 2601	1093	1094 3796 3797		
300 301 302	1693	1694	652 653 654	2602 2603	1095	1096 3798 3799		
303 304 305	1695	1696	655 656 657	2604 2605	1097	1098 3800 3801		
306 307 308	1697	1698	658 659 660	2606 2607	1099	1100 3802 3803		
309 310 311	1699	1701	661 662 663	2608 2609	1101	1102 3804 3805		
312 313 314	1702	1703	664 665 666	2610 2611	1103 1104	3806 3807		

Table 38: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T						
814	1105	1106	3808	3809	814	1221	1222	5334	5335	814		7233	7234	
	1107	1108	3810	3811		1223	1249	5336	5337			7235	7236	
	1109	1110	3812	3813		1250	1251	5338	5339			7237	7238	
	1111	1112	3815	3816		1252	1274	5340	5341			7239	7240	
	1113	1114	3817	3818		1275	1276	5342	5343			7241	7242	
	1115	1116	3819	3821		1294	1295 /	5344	5345			7244	7245	
	1117	1118	3822	3823		543		5347	5348			7246	7247	
	1119	1120	3824	3825				5349	5350			7250	7251	
	1121	1122	3827	3828				5351	5353			7252	7256	
	1123	1124	3829	3830				5354	5355			7257	7258	
	1125	1126	3831	3832				5356	5357			7259	7261	
	1127	1128	3833	3834				5359	5360			7262	7263	
	1129	1130	3835	3836				5361	5362			7264	7265	
	1131	1132	3837	3839				5363	5364			7267	7268	
	1133	1134	3840	3841				5365	5366			7269	7270	
	1135	1136	3842	3843				5367	5368			7274	7275	
	1137	1138	3860	3861				5369	5371			7276	7294	
	1139	1140	3862	3863				5372	5373			7295	7296	
	1141	1142	3864	3866				5374	5375			7297	7301	
	1143	1144	3867	3868				5392	5393			7302	7303 /	
	1145	1146	3869	3870				5394	5395			544		
	1147	1148	5270	5271				5396	5398	813	761 962 / 2	1194	1195	
	1149	1150	5272	5273				5399	5400			1223 / 3		
	1151	1152	5274	5275				5401	5402	812	/ 0	962 / 1		
	1153	1154	5276	5277				7173	7174	811	/ 0	761 / 1		
	1155	1156	5278	5279				7175	7176	810	761 962 1038	1220	1221	
	1157	1158	5280	5281				7177	7178		1044	1050	1222	1249
	1159	1160	5282	5283				7179	7180		1056	1062	1250	1251
	1161	1162	5284	5285				7181	7182		1194	1195	1252	1274
	1163	1164	5286	5287				7183	7184		1212	1213 /	1275	1276
	1165	1166	5288	5289				7185	7186		11	1294	1295 /	
	1167	1168	5290	5291				7187	7188			12		
	1169	1170	5292	5293				7189	7190	809	/ 0	761 / 1		
	1171	1172	5294	5295				7191	7192	808	761 / 1	1212	1213 /	
	1173	1174	5296	5297				7193	7194			2		
	1175	1176	5298	5299				7195	7196	807	/ 0	761 / 1		
	1177	1178	5300	5301				7197	7198	806	761 / 1	1194	1195 /	
	1179	1180	5302	5303				7199	7200			2		
	1181	1182	5304	5305				7201	7202	805	/ 0	761 / 1		
	1183	1184	5306	5307				7203	7204	804	/ 0	1044 / 1		
	1185	1186	5308	5309				7205	7206	803	/ 0	1050 / 1		
	1187	1190	5310	5311				7207	7208	802	/ 0	1056 / 1		
	1191	1192	5312	5313				7209	7210	801	/ 0	1038 / 1		
	1193	1194	5314	5315				7211	7212	800	/ 0	1062 / 1		
	1195	1196	5316	5317				7213	7214	799	/ 0	962 / 1		
	1197	1198	5318	5319				7215	7216	798	/ 0	1211 / 1		
	1199	1202	5320	5321				7217	7218	797	/ 0	1182 / 1		
	1203	1204	5322	5323				7219	7220	796	1182 / 1	706	1214 / 2	
	1205	1208	5324	5325				7221	7222	795	706 1214 / 2	1208	1209	
	1209	1210	5326	5327				7224	7225			1210 / 3		
	1211	1214	5328	5329				7226	7227	794	1209	1210	1176	1177
	1215	1216	5330	5331				7229	7230		1211 / 3	1178	1205 /	
	1217	1220	5332	5333				7231	7232			4		

Table 39: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
793	/ 0	701 / 1	765		696 / 1	762	1713 1714	327 328 329
792	/ 0	1202 / 1	764	696 1172	691 1164		1715 1716	330 331 332
791	701 / 1	1203 1204 / 2		1202 1203	1165 1166		1717 1719	333 334 335
790	/ 0	701 / 1		1204 / 5	1193 1196 / 6		1720 1721	336 337 338
789	1202 1203	1182 1209	763	691 1164	1170 1171		1722 1723	339 340 341
	1204 / 3	1210 1211 / 4		1165 1166	1172 1199		1725 1726	342 343 344
788	1176 1177	706 1183		1193 1196 / 6	1202 1203		1727 1728	345 346 347
	1205 / 3	1184 1214 / 4	762	962 1033	8 9 10 11 12		1729 2536	348 349 350
787	1209 1210 / 2	1176 1177		1624 1625	13 30 31 32		2537 2538	351 352 353
		1205 / 3		1626 1627	33 34 35 36		2539 2540	354 355 356
786	706 / 1	1209 1210 / 2		1628 1629	37 38 39 40		2541 2542	357 358 359
785	/ 0	706 / 1		1630 1631	41 42 43 44		2543 2544	360 361 362
784	701 706 962	1091 1092		1632 1633	45 46 47 48		2545 2546	363 364 365
	1044 1050	1120 1121		1634 1635	49 50 51 52		2547 2548	366 367 368
	1176 1177	1122 1149		1636 1637	53 54 55 107		2549 2550	369 370 371
	1183 1184	1150 1151		1638 1639	108 109 110		2551 2552	372 373 374
	1205 1214 / 11	1152 1179		1640 1641	111 112 113		2553 2554	375 376 377
		1180 1181 / 12		1642 1643	114 115 116		2555 2556	378 379 380
783	/ 0	1044 / 1		1644 1645	117 118 119		2557 2558	381 382 383
782	/ 0	1050 / 1		1646 1647	120 121 122		2559 2560	384 385 386
781	/ 0	962 / 1		1648 1649	123 124 125		2561 2562	387 388 389
780	962 1050 / 2	1033 1061		1650 1651	126 127 128		2563 2564	561 566 571
		1063 / 3		1652 1653	129 130 131		2565 2566	581 586 587
779	/ 0	1050 / 1		1654 1655	132 133 134		2567 2568	588 589 590
778	/ 0	962 / 1		1656 1657	135 136 137		2569 2570	591 592 593
777	/ 0	706 / 1		1658 1659	138 139 140		2571 2572	594 595 596
776	706 962 / 2	1183 1184		1660 1661	141 142 143		2573 2574	597 598 599
		1214 / 3		1662 1663	144 145 146		2575 2576	600 601 602
775	1183 1184	962 1176		1664 1665	147 148 149		2577 2578	603 604 605
	1214 / 3	1177 1205 / 4		1666 1667	150 151 152		2579 2580	606 607 608
774	1176 1177	706 1183		1668 1669	153 154 155		2581 2582	609 610 611
	1205 / 3	1184 1214 / 4		1670 1671	156 157 158		2583 2584	612 613 614
773	1183 1184	701 1176		1672 1673	159 160 161		2585 2586	615 616 617
	1214 / 3	1177 1205 / 4		1674 1675	162 163 164		2587 2588	618 619 620
772	701 706 / 2	1183 1184		1676 1677	165 166 167		2589 2590	621 622 623
		1214 / 3		1678 1679	168 169 170		2591 2592	624 625 626
771	/ 0	701 / 1		1680 1681	282 283 284		2593 2594	627 628 629
770	/ 0	706 / 1		1682 1683	285 286 287		2595 2596	630 631 632
769	/ 0	1217 / 1		1684 1685	288 289 290		2597 2598	633 634 635
768	701 / 1	1215 1216 / 2		1686 1687	291 292 293		2599 2600	636 637 638
				1688 1689	294 295 296		2601 2602	639 640 641
767	/ 0	701 / 1		1690 1691	297 298 299		2603 2604	642 643 644
766	1215 1216	1172 1202		1692 1693	300 301 302		2605 2606	645 646 647
	1217 / 3	1203 1204 / 4		1694 1695	303 304 305		2607 2608	648 649 650
765	/ 0			1696 1697	306 307 308		2609 2610	651 652 653
				1698 1699	309 310 311		2611 2613	654 655 656
				1701 1702	312 313 314		2614 2615	657 658 659
				1703 1704	315 316 317		2616 2617	660 661 662
				1705 1707	318 319 320		2619 2620	663 664 665
				1708 1709	321 322 323		2621 2622	666 667 668
				1710 1711	324 325 326		2623 2625	669 670 671
							2626 2627	672 673 674
							2628 2629	675 676 677

Table 40: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T		
762	2631	2632	678 679 680	762	3839	3840	1116 1117	762	7172	7173
	2633	2634	681 682 683		3841	3842	1118 1119		7174	7175
	2635	2637	684 685 686		3843	5270	1123 1124		7176	7177
	2638	2639	687 688 689		5271	5272	1125 1126		7178	7179
	2640	2641	690 691 692		5273	5274	1127 1128		7180	7181
	3738	3739	693 694 695		5275	5276	1129 1130		7182	7183
	3740	3741	696 697 698		5277	5278	1131 1132		7184	7185
	3742	3743	699 700 702		5279	5280	1133 1134		7186	7187
	3744	3745	703 704 705		5281	5282	1135 1136		7188	7189
	3746	3747	707 708 709		5283	5284	1137 1138		7190	7191
	3748	3749	710 711 712		5285	5286	1139 1140		7192	7193
	3750	3751	713 714 715		5287	5288	1141 1142		7194	7195
	3752	3753	716 717 718		5289	5290	1143 1144		7196	7197
	3754	3755	719 720 721		5291	5292	1145 1146		7198	7199
	3756	3757	722 723 724		5293	5294	1147 1148		7200	7201
	3758	3759	725 726 727		5295	5296	1153 1154		7202	7203
	3760	3761	728 729 730		5297	5298	1155 1156		7204	7205
	3762	3763	731 732 733		5299	5300	1157 1158		7206	7207
	3764	3765	734 735 736		5301	5302	1159 1160		7208	7209
	3766	3767	737 738 739		5303	5304	1161 1162		7210	7211
	3768	3769	740 741 742		5305	5306	1163 1164		7212	7213
	3770	3771	743 744 745		5307	5308	1165 1166		7214	7215
	3772	3773	746 747 748		5309	5310	1167 1168		7216	7217
	3774	3775	749 750 751		5311	5312	1169 1173		7218	7219
	3776	3777	752 753 754		5313	5314	1174 1175		7220	7221
	3778	3779	755 756 757		5315	5316	1185 1186		7222	7224
	3780	3781	758 759 760		5317	5318	1187 1190		7225	7226
	3782	3783	1039 1043		5319	5320	1191 1192		7227	7229
	3784	3785	1045 1049		5321	5322	1193 1196		7230	7231
	3786	3787	1051 1067		5323	5324	1197 1198		7232	7233
	3788	3789	1068 1069		5325	5326	1215 1216		7234	7235
	3790	3791	1070 1071		5327	5328	1217 / 496		7236	7237
	3792	3793	1072 1073		5329	5330			7239	7240
	3794	3795	1074 1075		5331	5332			7241	7242
	3796	3797	1076 1077		5333	5334			7244	7245
	3798	3799	1078 1079		5335	5336			7246	7247
	3800	3801	1080 1081		5337	5338			7250	7251
	3802	3803	1082 1083		5339	5340			7252	7256
	3804	3805	1084 1085		5341	5342			7257	7258
	3806	3807	1086 1087		5343	5344			7259	7261
	3808	3809	1088 1089		5345	5347			7262	7263
	3810	3811	1090 1093		5348	5349			7264	7268
	3812	3813	1094 1095		5350	5351			7269	7270
	3815	3816	1096 1097		5353	5354			7274	7275
	3817	3818	1098 1099		5355	5356			7276 / 495	
	3819	3821	1100 1101		5357	5359		761	/ 0	7172 / 1
	3822	3823	1102 1103		5360	5361		760	/ 0	7261 / 1
	3824	3825	1104 1105		5362	5363		759	1 7261 / 2	576 1055
	3827	3828	1106 1107		5365	5366				1057 / 3
	3829	3830	1108 1109		5367	5368		758	/ 0	1 / 1
	3831	3833	1110 1111		5369	5371		757	581 1063 / 2	7233 7259
	3834	3835	1112 1113		5372	5373				7261 / 3
	3836 3837		1114 1115		5374 5375			756	1 / 1	581 1063 / 2

Table 41: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
755	/ 0	1 / 1	753	348 349 350	1728 1729	753	698 699 700	3741 3742
754	/ 0	1048 / 1		351 352 353	2536 2537		701 702 703	3743 3744
753	8 9 10 11 12	1018 1046		354 355 356	2538 2539		704 705 706	3745 3746
	13 30 31 32	1047 1624		357 358 359	2540 2541		707 708 709	3747 3748
	33 34 35 36	1625 1626		360 361 362	2542 2543		710 711 712	3749 3750
	37 38 39 40	1627 1628		363 364 365	2544 2545		713 714 715	3751 3752
	41 42 43 44	1629 1630		366 367 368	2546 2547		716 717 718	3753 3754
	45 46 47 48	1631 1632		369 370 371	2548 2549		719 720 721	3755 3756
	49 50 51 52	1633 1634		372 373 374	2550 2551		722 723 724	3757 3758
	53 54 55 107	1635 1636		375 376 377	2552 2553		725 726 727	3759 3760
	108 109 110	1637 1638		378 379 380	2554 2555		728 729 730	3761 3762
	111 112 113	1639 1640		381 382 383	2556 2557		731 732 733	3763 3764
	114 115 116	1641 1642		384 385 386	2558 2559		734 735 736	3765 3766
	117 118 119	1643 1644		387 388 389	2560 2561		737 738 739	3767 3768
	120 121 122	1645 1646		561 566 571	2562 2563		740 741 742	3769 3770
	123 124 125	1647 1648		576 581 586	2564 2565		743 744 745	3771 3772
	126 127 128	1649 1650		587 588 589	2566 2567		746 747 748	3773 3774
	129 130 131	1651 1652		590 591 592	2568 2569		749 750 751	3775 3776
	132 133 134	1653 1654		593 594 595	2570 2571		752 753 754	3777 3778
	135 136 137	1655 1656		596 597 598	2572 2573		755 756 757	3779 3780
	138 139 140	1657 1658		599 600 601	2574 2575		758 759 760	3781 3782
	141 142 143	1659 1660		602 603 604	2576 2577		761 1038	3783 3784
	144 145 146	1661 1662		605 606 607	2578 2579		1039 1051	3785 3786
	147 148 149	1663 1664		608 609 610	2580 2581		1055 1056	3787 3788
	150 151 152	1665 1666		611 612 613	2582 2583		1057 1061	3789 3790
	153 154 155	1667 1668		614 615 616	2584 2585		1062 1063	3791 3792
	156 157 158	1669 1670		617 618 619	2586 2587		1067 1068	3793 3794
	159 160 161	1671 1672		620 621 622	2588 2589		1069 1070	3795 3796
	162 163 164	1673 1674		623 624 625	2590 2591		1071 1072	3797 3798
	165 166 167	1675 1676		626 627 628	2592 2593		1081 1082	3799 3800
	279 280 281	1677 1678		629 630 631	2594 2595		1083 1084	3801 3802
	282 283 284	1679 1680		632 633 634	2596 2597		1085 1086	3803 3804
	285 286 287	1681 1682		635 636 637	2598 2599		1087 1088	3805 3806
	288 289 290	1683 1684		638 639 640	2600 2601		1089 1090	3807 3808
	291 292 293	1685 1686		641 642 643	2602 2603		1091 1092	3809 3810
	294 295 296	1687 1688		644 645 646	2604 2605		1093 1094	3811 3812
	297 298 299	1689 1690		647 648 649	2606 2607		1095 1096	3813 3815
	300 301 302	1691 1692		650 651 652	2608 2609		1097 1098	3816 3817
	303 304 305	1693 1694		653 654 655	2610 2611		1099 1100	3818 3819
	306 307 308	1695 1696		656 657 658	2613 2614		1101 1111	3821 3822
	309 310 311	1697 1698		659 660 661	2615 2616		1112 1113	3823 3824
	312 313 314	1699 1701		662 663 664	2617 2619		1114 1115	3825 3827
	315 316 317	1702 1703		665 666 667	2620 2621		1116 1117	3828 3829
	318 319 320	1704 1705		668 669 670	2622 2623		1118 1119	3830 3831
	321 322 323	1707 1708		671 672 673	2625 2626		1120 1121	3833 3834
	324 325 326	1709 1710		674 675 676	2627 2628		1122 1123	3835 3836
	327 328 329	1711 1713		677 678 679	2629 2631		1124 1125	3837 3839
	330 331 332	1714 1715		680 681 682	2632 2633		1126 1127	3840 3841
	333 334 335	1716 1717		683 684 685	2634 2635		1128 1129	3842 3843
	336 337 338	1719 1720		686 687 688	2637 2638		1130 1141	5270 5271
	339 340 341	1721 1722		689 690 691	2639 2640		1142 1143	5272 5273
	342 343 344	1723 1725		692 693 694	2641 3738		1144 1145	5274 5275
	345 346 347	1726 1727		695 696 697	3739 3740		1146 1147	5276 5277

Table 42: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T						
753	1148	1149	5278	5279	753			7186	7187	741			1217 / 3	
	1150	1151	5280	5281				7188	7189		740	/ 0	1062 / 1	
	1152	1153	5282	5283				7190	7191		739	/ 0	686 / 1	
	1154	1155	5284	5285				7192	7193		738	/ 0	696 / 1	
	1156	1157	5286	5287				7194	7195		737	686 696 / 2	1171 1172	
	1158	1159	5288	5289				7196	7197				1202 / 3	
	1171	1172	5290	5291				7198	7199		736	/ 0	696 / 1	
	1173	1174	5292	5293				7200	7201		735	/ 0	686 / 1	
	1175	1176	5294	5295				7202	7203		734	/ 0	1214 / 1	
	1177	1178	5296	5297				7204	7205		733	696 / 1	1215 1216 / 2	
	1179	1180	5298	5299				7206	7207					
	1181	1182	5300	5301				7208	7209		732	1214 1215	696 1072	
	1183	1184	5302	5303				7210	7211			1216 / 3	1101 1130 / 4	
	1185	1186	5304	5305				7212	7213					
	1187	1202	5306	5307				7214	7215		731	1072 1101	1184 1214	
	1203	1204	5308	5309				7216	7217			1130 / 3	1215 1216 / 4	
	1205	1208	5310	5311				7218	7219					
	1209	1210	5312	5313				7220	7221		730	1184 1214	566 1042	
	1211	1212	5314	5315				7222	7224			1215 1216 / 4	1072 1101	
	1213	1214	5316	5317				7225	7226				1130 / 5	
	1215	1216	5318	5319				7227	7229		729	1101 1130 / 2	997 1017	
	1217 / 491		5320	5321				7230	7231				1019 / 3	
			5322	5323				7232	7234		728	566 997 1017	1182 1183	
			5324	5325				7235	7236			1019 1042	1184 1211	
			5326	5327				7237	7239			1072 / 6	1214 1215	
			5328	5329				7240	7241				1216 / 7	
			5330	5331				7242	7244		727	1182 1183	566 997 1017	
			5332	5333				7245	7246			1184 1211	1019 1042	
			5334	5335				7247	7250			1214 1215	1072 1101	
			5336	5337				7251	7252			1216 / 7	1130 / 8	
			5338	5339				7256	7257		726	566 686 696	1068 1097	
			5340	5341				7258	7262			962 997 1017	1098 1126	
			5342	5343				7263	7264			1019 1042	1127 1128	
			5344	5345				7268	7269			1062 1072	1155 1156	
			5347	5348				7270	7274			1101 1130	1157 1184	
			5349	5350				7275	7276 / 492			1171 1172	1185 1186	
			5351	5353								1202 / 15	1187 1214	
			5354	5355		752	1 1206 1207 / 3	1023 1051 / 4					1215 1216 / 16	
			5356	5357										
			5359	5360		751	1023 1051 / 2	1 1206 1207 / 3				725	/ 0	1062 / 1
			5361	5362								724	1097 1126	962 1039
		5363	5365							1127 1155	1040 1041			
		5366	5367	750	1 / 1	1023 1051 / 2				1156 1157	1042 1069			
		5368	5369							1184 1185	1070 1071			
		5371	5372	749	/ 0	1 / 1				1186 1187	1072 1099			
		5373	5374	748	/ 0	761 / 1				1214 1215	1100 1101			
		5375	7173	747	/ 0	691 / 1				1216 / 13	1129 1130 / 14			
		7174	7175	746	/ 0	1056 / 1								
		7176	7177	745	/ 0	1038 / 1			723	1039 1040	686 1097			
		7178	7179	744	/ 0	962 / 1				1041 1042	1126 1127			
		7180	7181	743	/ 0	1062 / 1				1069 1070	1155 1156			
		7182	7183	742	/ 0	686 / 1				1071 1072	1157 1184			
		7184	7185	741	686 1062 / 2	1158 1159				1099 1100	1185 1186			

Table 43: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
723	1101 1129	1187 1214	699		566 / 1	691	1690 1691	318 319 320
	1130 / 13	1215 1216 / 14	698	566 706 / 2	997 1017 / 3		1692 1693	321 322 323
722	686 962 / 2	1013 1039 / 3	697	/ 0	706 / 1		1694 1695	324 325 326
721	1126 1127	962 1040	696	/ 0	566 / 1		1696 1697	327 328 329
	1155 1156	1041 1042	695	/ 0	1205 / 1		1698 1699	330 331 332
	1157 1184	1069 1070	694	566 1205 / 2	1208 1209 / 3		1701 1702	333 334 335
	1185 1186	1071 1072					1703 1704	336 337 338
	1187 1214	1099 1100	693	1208 1209	566 1096		1705 1707	339 340 341
	1215 1216 / 12	1101 1129 / 13		1210 / 3	1125 1154 / 4		1708 1709	342 343 344
720	1238 1239	686 1126	692	/ 0	1066 / 1		1710 1711	345 346 347
	1240 1264	1127 1155	691	566 962 997	8 9 10 11 12		1713 1714	348 349 350
	1265 1266	1156 1157		1013 1017	13 30 31 32		1715 1716	351 352 353
	1267 1286	1184 1185		1018 1019	33 34 35 36		1717 1719	354 355 356
	1287 1288	1186 1187		1023 1040	37 38 39 40		1720 1721	357 358 359
	1303 1304 / 12	1214 1215 / 13		1041 1042	41 42 43 44		1722 1723	360 361 362
719	761 / 1	1303 1304 / 2		1043 1045	45 46 47 48		1725 1726	363 364 365
718	1046 1047	761 1238		1046 1047	49 50 51 52		1727 1728	366 367 368
	1048 1075	1239 1240		1048 1066	53 54 55 107		1729 1753	369 370 371
	1076 1077	1264 1265		1624 1625	108 109 110		1754 1755	372 373 374
	1078 1105	1266 1267		1626 1627	111 112 113		1756 2536	375 376 377
	1106 1107 / 10	1286 1287 / 11		1628 1629	114 115 116		2537 2538	378 379 380
717	1 686 691	1046 1047		1630 1631	117 118 119		2539 2540	381 382 383
	761 962 1056	1048 1075		1632 1633	120 121 122		2541 2542	384 385 386
	1062 1206	1076 1077		1634 1635	123 124 125		2543 2544	387 388 389
	1207 / 9	1078 1105 / 10		1636 1637	126 127 128		2545 2546	561 571 586
716	/ 0	1 / 1		1638 1639	129 130 131		2547 2548	587 588 589
715	1 / 1	1206 1207 / 2		1640 1641	132 133 134		2549 2550	590 591 592
714	/ 0	1 / 1		1642 1643	135 136 137		2551 2552	593 594 595
713	1 / 1	691 761 / 2		1644 1645	138 139 140		2553 2554	596 597 598
712	/ 0	686 / 1		1646 1647	141 142 143		2555 2556	599 600 601
711	/ 0	1056 / 1		1648 1649	144 145 146		2557 2558	602 603 604
710	/ 0	962 / 1		1650 1651	147 148 149		2559 2560	605 606 607
709	/ 0	1062 / 1		1652 1653	150 151 152		2561 2562	608 609 610
708	/ 0	1 / 1		1654 1655	153 154 155		2563 2564	611 612 613
707	/ 0	696 / 1		1656 1657	156 157 158		2565 2566	614 615 616
706	1 696 / 2	1182 1183 / 3		1658 1659	159 160 161		2567 2568	617 618 619
705	/ 0	1 / 1		1660 1661	162 163 164		2569 2570	620 621 622
704	/ 0	706 / 1		1662 1663	165 166 167		2571 2572	623 624 625
703	/ 0	696 / 1		1664 1665	279 280 281		2573 2574	626 627 628
702	696 706 / 2	1171 1172 / 3		1666 1667	282 283 284		2575 2576	629 630 631
701	/ 0	706 / 1		1668 1669	285 286 287		2577 2578	632 633 634
700	/ 0	696 / 1		1670 1671	288 289 290		2579 2580	635 636 637
699	/ 0			1672 1673	291 292 293		2581 2582	638 639 640
				1674 1675	294 295 296		2583 2584	641 642 643
				1676 1677	297 298 299		2585 2586	644 645 646
				1678 1679	300 301 302		2587 2588	647 648 649
				1680 1681	303 304 305		2589 2590	650 651 652
				1682 1683	306 307 308		2591 2592	653 654 655
				1684 1685	309 310 311		2593 2594	656 657 658
				1686 1687	312 313 314		2595 2596	659 660 661
				1688 1689	315 316 317		2597 2598	662 663 664
							2599 2600	665 666 667
							2601 2602	668 669 670

Table 44: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
691	2603	2604	691	3806	3807	691	5341	5342
	2605	2606		3808	3809		5343	5344
	2607	2608		3810	3811		5345	5347
	2609	2610		3812	3813		5348	5349
	2611	2613		3815	3816		5350	5354
	2614	2615		3817	3818		5355	5356
	2616	2617		3819	3821		5357	5359
	2619	2620		3822	3823		5360	5361
	2621	2622		3824	3825		5362	5363
	2623	2625		3827	3828		5365	5366
	2626	2627		3829	3830		5367	5368
	2628	2629		3831	3833		5369	5371
	2631	2632		3834	3835		5372	5373
	2633	2634		3836	3837		5374	5375
	2635	2637		3839	3840		5399	5400
	2638	2639		3841	3842		5401	5402 /
	2640	2641		3843	3867		433	
	2665	2666		3868	3869	690	8 9 10 11 12	962 1013
	2667	2668		3870	5271		13 30 31 32	1018 1023
	3738	3739		5272	5273		33 34 35 36	1040 1041
	3740	3741		5274	5275		37 38 39 40	1042 1043
	3742	3743		5276	5277		41 42 43 44	1045 1046
	3744	3745		5278	5279		45 46 47 48	1047 1048
	3746	3747		5280	5281		49 50 51 52	1624 1625
	3748	3749		5282	5283		53 54 55 107	1626 1627
	3750	3751		5284	5285		108 109 110	1628 1629
	3752	3753		5286	5287		111 112 113	1630 1631
	3754	3755		5288	5289		114 115 116	1632 1633
	3756	3757		5290	5291		117 118 119	1634 1635
	3758	3759		5292	5293		120 121 122	1636 1637
	3760	3761		5294	5295		123 124 125	1638 1639
	3762	3763		5296	5297		126 127 128	1640 1641
	3764	3765		5298	5299		129 130 131	1642 1643
	3766	3767		5300	5301		132 133 134	1644 1645
	3768	3769		5302	5303		135 136 137	1646 1647
	3770	3771		5304	5305		138 139 140	1648 1649
	3772	3773		5306	5307		141 142 143	1650 1651
	3774	3775		5308	5309		144 145 146	1652 1653
	3776	3777		5310	5311		147 148 149	1654 1655
	3778	3779		5312	5313		150 151 152	1656 1657
	3780	3781		5314	5315		153 154 155	1658 1659
	3782	3783		5316	5317		156 157 158	1660 1661
	3784	3785		5318	5319		159 160 161	1662 1663
	3786	3787		5320	5321		162 163 164	1664 1665
	3788	3789		5322	5323		165 166 167	1666 1667
	3790	3791		5324	5325		279 280 281	1668 1669
	3792	3793		5327	5328		282 283 284	1670 1671
	3794	3795		5329	5330		285 286 287	1672 1673
	3796	3797		5331	5332		288 289 290	1674 1675
	3798	3799		5333	5334		291 292 293	1676 1677
	3800	3801		5335	5336		294 295 296	1678 1679
	3802	3803		5337	5338		297 298 299	1680 1681
	3804 3805	1178 1179		5339 5340			300 301 302	1682 1683

Table 45: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
690	303 304 305	1684 1685	690	656 657 658	2597 2598	690	1149 1150	3800 3801
	306 307 308	1686 1687		659 660 661	2599 2600		1151 1152	3802 3803
	309 310 311	1688 1689		662 663 664	2601 2602		1153 1154	3804 3805
	312 313 314	1690 1691		665 666 667	2603 2604		1173 1174	3806 3807
	315 316 317	1692 1693		668 669 670	2605 2606		1175 1179	3808 3809
	318 319 320	1694 1695		671 672 673	2607 2608		1180 1181 /	3810 3811
	321 322 323	1696 1697		674 675 676	2609 2610	427		3812 3813
	324 325 326	1698 1699		677 678 679	2611 2613			3815 3816
	327 328 329	1701 1702		680 681 682	2614 2615			3817 3818
	330 331 332	1703 1704		683 684 685	2616 2617			3819 3821
	333 334 335	1705 1707		687 688 689	2619 2620			3822 3823
	336 337 338	1708 1709		690 692 693	2621 2622			3824 3825
	339 340 341	1710 1711		694 695 697	2623 2625			3827 3828
	342 343 344	1713 1714		698 699 700	2626 2627			3829 3830
	345 346 347	1715 1716		702 703 704	2628 2629			3831 3833
	348 349 350	1717 1719		705 707 708	2631 2632			3834 3835
	351 352 353	1720 1721		709 710 711	2633 2634			3836 3837
	354 355 356	1722 1723		712 713 714	2635 2637			3839 3840
	357 358 359	1725 1726		715 716 717	2638 2639			3841 3842
	360 361 362	1727 1728		718 719 720	2640 2641			3843 3867
	363 364 365	1729 1753		721 722 723	2665 2666			3868 3869
	366 367 368	1754 1755		724 725 726	2667 2668			3870 5271
	369 370 371	1756 2536		727 728 729	3738 3739			5272 5273
	372 373 374	2537 2538		730 731 732	3740 3741			5274 5275
	375 376 377	2539 2540		733 734 735	3742 3743			5276 5277
	378 379 380	2541 2542		736 737 738	3744 3745			5278 5279
	381 382 383	2543 2544		739 740 741	3746 3747			5280 5281
	384 385 386	2545 2546		742 743 744	3748 3749			5282 5283
	387 388 389	2547 2548		745 746 747	3750 3751			5284 5285
	561 571 586	2549 2550		748 749 750	3752 3753			5286 5287
	587 588 589	2551 2552		751 752 753	3754 3755			5288 5289
	590 591 592	2553 2554		754 755 756	3756 3757			5290 5291
	593 594 595	2555 2556		757 758 759	3758 3759			5292 5293
	596 597 598	2557 2558		760 1081	3760 3761			5294 5295
	599 600 601	2559 2560		1082 1083	3762 3763			5296 5297
	602 603 604	2561 2562		1084 1085	3764 3765			5298 5299
	605 606 607	2563 2564		1086 1087	3766 3767			5300 5301
	608 609 610	2565 2566		1088 1089	3768 3769			5302 5303
	611 612 613	2567 2568		1090 1091	3770 3771			5304 5305
	614 615 616	2569 2570		1092 1093	3772 3773			5306 5307
	617 618 619	2571 2572		1094 1095	3774 3775			5308 5309
	620 621 622	2573 2574		1096 1111	3776 3777			5310 5311
	623 624 625	2575 2576		1112 1113	3778 3779			5312 5313
	626 627 628	2577 2578		1114 1115	3780 3781			5314 5315
	629 630 631	2579 2580		1116 1117	3782 3783			5316 5317
	632 633 634	2581 2582		1118 1119	3784 3785			5318 5319
	635 636 637	2583 2584		1120 1121	3786 3787			5320 5321
	638 639 640	2585 2586		1122 1123	3788 3789			5322 5323
	641 642 643	2587 2588		1124 1125	3790 3791			5324 5325
	644 645 646	2589 2590		1141 1142	3792 3793			5327 5328
	647 648 649	2591 2592		1143 1144	3794 3795			5329 5330
	650 651 652	2593 2594		1145 1146	3796 3797			5331 5332
	653 654 655	2595 2596		1147 1148	3798 3799			5333 5334

Table 46: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
690		5335 5336	689	1676 1677	294 295 296	689	2589 2590	647 648 649
		5337 5338		1678 1679	297 298 299		2591 2592	650 651 652
		5339 5340		1680 1681	300 301 302		2593 2594	653 654 655
		5341 5342		1682 1683	303 304 305		2595 2596	656 657 658
		5343 5344		1684 1685	306 307 308		2597 2598	659 660 661
		5345 5347		1686 1687	309 310 311		2599 2600	662 663 664
		5348 5349		1688 1689	312 313 314		2601 2602	665 666 667
		5350 5354		1690 1691	315 316 317		2603 2604	668 669 670
		5355 5356		1692 1693	318 319 320		2605 2606	671 672 673
		5357 5359		1694 1695	321 322 323		2607 2608	674 675 676
		5360 5361		1696 1697	324 325 326		2609 2610	677 678 679
		5362 5363		1698 1699	327 328 329		2611 2613	680 681 682
		5365 5366		1701 1702	330 331 332		2614 2615	683 684 685
		5367 5368		1703 1704	333 334 335		2616 2617	687 688 689
		5369 5371		1705 1707	336 337 338		2619 2620	690 692 693
		5372 5373		1708 1709	339 340 341		2621 2622	694 695 697
		5374 5375		1710 1711	342 343 344		2623 2625	698 699 700
		5399 5400		1713 1714	345 346 347		2626 2627	702 703 704
		5401 5402 /		1715 1716	348 349 350		2628 2629	705 707 708
		428		1717 1719	351 352 353		2631 2632	709 710 711
689	1 962 1013	8 9 10 11 12	1720 1721	354 355 356	2633 2634	712 713 714		
	1018 1023	13 30 31 32	1722 1723	357 358 359	2635 2637	715 716 717		
	1040 1041	33 34 35 36	1725 1726	360 361 362	2638 2639	718 719 720		
	1042 1043	37 38 39 40	1727 1728	363 364 365	2640 2641	721 722 723		
	1045 1046	41 42 43 44	1729 1746	366 367 368	2658 2659	724 725 726		
	1047 1048	45 46 47 48	1747 1748	369 370 371	2660 2661	727 728 729		
	1049 1051	49 50 51 52	1749 2536	372 373 374	3738 3739	730 731 732		
	1624 1625	53 54 55 107	2537 2538	375 376 377	3740 3741	733 734 735		
	1626 1627	108 109 110	2539 2540	378 379 380	3742 3743	736 737 738		
	1628 1629	111 112 113	2541 2542	381 382 383	3744 3745	739 740 741		
	1630 1631	114 115 116	2543 2544	384 385 386	3746 3747	742 743 744		
	1632 1633	117 118 119	2545 2546	387 388 389	3748 3749	745 746 747		
	1634 1635	120 121 122	2547 2548	561 581 586	3750 3751	748 749 750		
	1636 1637	123 124 125	2549 2550	587 588 589	3752 3753	751 752 753		
	1638 1639	126 127 128	2551 2552	590 591 592	3754 3755	754 755 756		
	1640 1641	129 130 131	2553 2554	593 594 595	3756 3757	757 758 759		
	1642 1643	132 133 134	2555 2556	596 597 598	3758 3759	760 1061		
	1644 1645	135 136 137	2557 2558	599 600 601	3760 3761	1063 1081		
	1646 1647	138 139 140	2559 2560	602 603 604	3762 3763	1082 1083		
	1648 1649	141 142 143	2561 2562	605 606 607	3764 3765	1084 1085		
	1650 1651	144 145 146	2563 2564	608 609 610	3766 3767	1086 1087		
	1652 1653	147 148 149	2565 2566	611 612 613	3768 3769	1088 1089		
	1654 1655	150 151 152	2567 2568	614 615 616	3770 3771	1090 1091		
	1656 1657	153 154 155	2569 2570	617 618 619	3772 3773	1092 1093		
	1658 1659	156 157 158	2571 2572	620 621 622	3774 3775	1094 1095		
	1660 1661	159 160 161	2573 2574	623 624 625	3776 3777	1096 1111		
	1662 1663	162 163 164	2575 2576	626 627 628	3778 3779	1112 1113		
	1664 1665	165 166 167	2577 2578	629 630 631	3780 3781	1114 1115		
	1666 1667	279 280 281	2579 2580	632 633 634	3782 3783	1116 1117		
	1668 1669	282 283 284	2581 2582	635 636 637	3784 3785	1118 1119		
	1670 1671	285 286 287	2583 2584	638 639 640	3786 3787	1120 1121		
	1672 1673	288 289 290	2585 2586	641 642 643	3788 3789	1122 1123		
	1674 1675	291 292 293	2587 2588	644 645 646	3790 3791	1124 1125		

Table 47: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
689	3792 3793	1141 1142	689	5327 5328		681	128 129 130	1641 1642
	3794 3795	1143 1144		5329 5330			131 132 133	1643 1644
	3796 3797	1145 1146		5331 5332			134 135 136	1645 1646
	3798 3799	1147 1148		5333 5334			137 138 139	1647 1648
	3800 3801	1149 1150		5335 5336			140 141 142	1649 1650
	3802 3803	1151 1152		5337 5338			143 144 145	1651 1652
	3804 3805	1153 1154		5339 5340			146 147 148	1653 1654
	3806 3807	1173 1174		5342 5343			149 150 151	1655 1656
	3808 3809	1175 1179		5344 5345			152 153 154	1657 1658
	3810 3811	1180 1181 /		5347 5348			155 156 157	1659 1660
	3812 3813	429		5349 5350			158 159 160	1661 1662
	3815 3816			5354 5355			161 162 163	1663 1664
	3817 3818			5356 5357			164 165 166	1665 1666
	3819 3821			5359 5360			167 279 280	1667 1668
	3822 3823			5361 5362			281 282 283	1669 1670
	3824 3825			5363 5365			284 285 286	1671 1672
	3827 3828			5366 5367			287 288 289	1673 1674
	3829 3830			5368 5372			290 291 292	1675 1676
	3831 3833			5373 5374			293 294 295	1677 1678
	3834 3835			5375 5392			296 297 298	1679 1680
	3836 3837			5393 5394			299 300 301	1681 1682
	3839 3840			5395 / 428			302 303 304	1683 1684
	3841 3842		688	/ 0	1 / 1		305 306 307	1685 1686
	3843 3860		687	581 1061	566 1043		308 309 310	1687 1688
	3861 3862			1063 / 3	1045 1746 /		311 312 313	1689 1690
	3863 5271				4		314 315 316	1691 1692
	5272 5273		686	1 1746 5341	581 1061		317 318 319	1693 1694
	5274 5275			5369 5371 /	1063 5321		320 321 322	1695 1696
	5276 5277			5	5347 5375 /		323 324 325	1697 1698
	5278 5279				6		326 327 328	1699 1701
	5280 5281		685	581 1061	1 5341 5369		329 330 331	1702 1703
	5282 5283			1063 / 3	5371 / 4		332 333 334	1704 1705
	5284 5285		684	5326 5351	581 1061		335 336 337	1707 1708
	5286 5287			5353 / 3	1063 5395 /		338 339 340	1709 1710
	5288 5289				4		341 342 343	1711 1713
	5290 5291		683	5270 5395 /	5326 5351		344 345 346	1714 1715
	5292 5293			2	5353 / 3		347 348 349	1716 1717
	5294 5295		682	/ 0	5270 / 1		350 351 352	1719 1720
	5296 5297		681	1 8 9 10 11	1013 1018		353 354 355	1721 1722
	5298 5299			12 13 30 31	1033 1040		356 357 358	1723 1725
	5300 5301			32 33 34 35	1041 1042		359 360 361	1726 1727
	5302 5303			36 37 38 39	1057 1058		362 363 364	1728 1729
	5304 5305			40 41 42 43	1059 1060		365 366 367	1746 1747
	5306 5307			44 45 46 47	1064 1065		368 369 370	1748 1749
	5308 5309			48 49 50 51	1066 1624		371 372 373	2536 2537
	5310 5311			52 53 54 55	1625 1626		374 375 376	2538 2539
	5312 5313			107 108 109	1627 1628		377 378 379	2540 2541
	5314 5315			110 111 112	1629 1630		380 381 382	2542 2543
	5316 5317			113 114 115	1631 1632		383 384 385	2544 2545
	5318 5319			116 117 118	1633 1634		386 387 388	2546 2547
	5320 5321			119 120 121	1635 1636		389 561 566	2548 2549
	5322 5323			122 123 124	1637 1638		581 586 587	2550 2551
	5324 5325			125 126 127	1639 1640		588 589 590	2552 2553

Table 48: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
681	591 592 593	2554 2555	681	750 751 752	3757 3758	681		5291 5292
	594 595 596	2556 2557		753 754 755	3759 3760			5293 5294
	597 598 599	2558 2559		756 757 758	3761 3762			5295 5296
	600 601 602	2560 2561		759 760 1050	3763 3764			5297 5298
	603 604 605	2562 2563		1075 1076	3765 3766			5299 5300
	606 607 608	2564 2565		1077 1078	3767 3768			5301 5302
	609 610 611	2566 2567		1079 1080	3769 3770			5303 5304
	612 613 614	2568 2569		1081 1082	3771 3772			5305 5306
	615 616 617	2570 2571		1083 1084	3773 3774			5307 5308
	618 619 620	2572 2573		1105 1106	3775 3776			5309 5310
	621 622 623	2574 2575		1107 1108	3777 3778			5311 5312
	624 625 626	2576 2577		1109 1110	3779 3780			5313 5314
	627 628 629	2578 2579		1111 1112	3781 3782			5315 5316
	630 631 632	2580 2581		1113 1135	3783 3784			5317 5318
	633 634 635	2582 2583		1136 1137	3785 3786			5319 5320
	636 637 638	2584 2585		1138 1139	3787 3788			5322 5323
	639 640 641	2586 2587		1140 1141	3789 3790			5324 5325
	642 643 644	2588 2589		1142 1165	3791 3792			5327 5328
	645 646 647	2590 2591		1166 1167	3793 3794			5329 5330
	648 649 650	2592 2593		1168 1169	3795 3796			5331 5332
	651 652 653	2594 2595		1170 1171	3797 3798			5333 5334
	654 655 656	2596 2597		1196 1197	3799 3800			5335 5336
	657 658 659	2598 2599		1198 1199 /	3801 3802			5337 5338
	660 661 662	2600 2601		422	3803 3804			5339 5340
	663 664 665	2602 2603			3805 3806			5342 5343
	666 667 668	2604 2605			3807 3808			5344 5345
	669 670 671	2606 2607			3809 3810			5348 5349
	672 673 674	2608 2609			3811 3812			5350 5354
	675 676 677	2610 2611			3813 3815			5355 5356
	678 679 680	2613 2614			3816 3817			5357 5359
	681 682 683	2615 2616			3818 3819			5360 5361
	684 685 686	2617 2619			3821 3822			5362 5363
	687 688 689	2620 2621			3823 3824			5365 5366
	690 691 692	2622 2623			3825 3827			5367 5368
	693 694 695	2625 2626			3828 3829			5372 5373
	696 697 698	2627 2628			3830 3831			5374 5392
	699 700 701	2629 2631			3833 3834			5393 5394
	702 703 704	2632 2633			3835 3836			5395 / 423
	705 706 707	2634 2635			3837 3839	680	761 / 1	1028 1055 /
	708 709 710	2637 2638			3840 3841			2
	711 712 713	2639 2640			3842 3843	679	/ 0	706 / 1
	714 715 716	2641 2658			3860 3861	678	/ 0	761 / 1
	717 718 719	2659 2660			3862 3863	677	/ 0	1050 / 1
	720 721 722	2661 3738			5271 5272	676	/ 0	962 / 1
	723 724 725	3739 3740			5273 5274	675	/ 0	701 / 1
	726 727 728	3741 3742			5275 5276	674	/ 0	686 / 1
	729 730 731	3743 3744			5277 5278	673	/ 0	1 / 1
	732 733 734	3745 3746			5279 5280	672	/ 0	581 / 1
	735 736 737	3747 3748			5281 5282	671	1 581 / 2	1009 1032
	738 739 740	3749 3750			5283 5284			1034 / 3
	741 742 743	3751 3752			5285 5286	670	1009 1032	696 1170
	744 745 746	3753 3754			5287 5288		1034 / 3	1171 1199 /
	747 748 749	3755 3756			5289 5290			4
						669		

Table 49: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
669	696 1170	1 581 1009	664	1695 1696	330 331 332	664	2613 2614	683 684 685
	1171 1199 /	1032 1034 /		1697 1698	333 334 335		2615 2616	687 688 689
	4	5		1699 1701	336 337 338		2617 2619	690 691 692
668	/ 0	561 / 1		1702 1703	339 340 341		2620 2621	693 694 695
667	1 561 / 2	993 1014		1704 1705	342 343 344		2622 2623	696 697 698
		1037 / 3		1707 1708	345 346 347		2625 2626	699 700 702
666	/ 0	561 / 1		1709 1710	348 349 350		2627 2628	703 704 705
665	/ 0	1 / 1		1711 1713	351 352 353		2629 2631	707 708 709
664	1 962 993	8 9 10 11 12		1714 1715	354 355 356		2632 2633	710 711 712
	1009 1013	13 30 31 32		1716 1717	357 358 359		2634 2635	713 714 715
	1014 1018	33 34 35 36		1719 1720	360 361 362		2637 2638	716 717 718
	1028 1032	37 38 39 40		1721 1722	363 364 365		2639 2640	719 720 721
	1033 1034	41 42 43 44		1723 1725	366 367 368		2641 3738	722 723 724
	1037 1040	45 46 47 48		1726 1727	369 370 371		3739 3740	725 726 727
	1041 1042	49 50 51 52		1728 1729	372 373 374		3741 3742	728 729 730
	1058 1059	53 54 55 107		2536 2537	375 376 377		3743 3744	731 732 733
	1060 1064	108 109 110		2538 2539	378 379 380		3745 3746	734 735 736
	1065 1066	111 112 113		2540 2541	381 382 383		3747 3748	737 738 739
	1624 1625	114 115 116		2542 2543	384 385 386		3749 3750	740 741 742
	1626 1627	117 118 119		2544 2545	387 388 389		3751 3752	743 744 745
	1628 1629	120 121 122		2546 2547	566 576 586		3753 3754	746 747 748
	1630 1631	123 124 125		2548 2549	587 588 589		3755 3756	749 750 751
	1632 1633	126 127 128		2550 2551	590 591 592		3757 3758	752 753 754
	1634 1635	129 130 131		2552 2553	593 594 595		3759 3760	755 756 757
	1636 1637	132 133 134		2554 2555	596 597 598		3761 3762	758 759 760
	1638 1639	135 136 137		2556 2557	599 600 601		3763 3764	1075 1076
	1640 1641	138 139 140		2558 2559	602 603 604		3765 3766	1077 1078
	1642 1643	141 142 143		2560 2561	605 606 607		3767 3768	1079 1080
	1644 1645	144 145 146		2562 2563	608 609 610		3769 3770	1081 1082
	1646 1647	147 148 149		2564 2565	611 612 613		3771 3772	1083 1084
	1648 1649	150 151 152		2566 2567	614 615 616		3773 3774	1105 1106
	1650 1651	153 154 155		2568 2569	617 618 619		3775 3776	1107 1108
	1652 1653	156 157 158		2570 2571	620 621 622		3777 3778	1109 1110
	1654 1655	159 160 161		2572 2573	623 624 625		3779 3780	1111 1112
	1656 1657	162 163 164		2574 2575	626 627 628		3781 3782	1113 1135
	1658 1659	165 166 167		2576 2577	629 630 631		3783 3784	1136 1137
	1660 1661	279 280 281		2578 2579	632 633 634		3785 3786	1138 1139
	1662 1663	282 283 284		2580 2581	635 636 637		3787 3788	1140 1141
	1664 1665	285 286 287		2582 2583	638 639 640		3789 3790	1142 1165
	1666 1667	288 289 290		2584 2585	641 642 643		3791 3792	1166 1167
	1668 1669	291 292 293		2586 2587	644 645 646		3793 3794	1168 1169
	1670 1671	294 295 296		2588 2589	647 648 649		3795 3796	1170 1171
	1672 1673	297 298 299		2590 2591	650 651 652		3797 3798	1196 1197
	1674 1675	300 301 302		2592 2593	653 654 655		3799 3800	1198 1199 /
	1676 1677	303 304 305		2594 2595	656 657 658		3801 3802	416
	1678 1679	306 307 308		2596 2597	659 660 661		3803 3804	
	1680 1681	309 310 311		2598 2599	662 663 664		3805 3806	
	1682 1683	312 313 314		2600 2601	665 666 667		3807 3808	
	1684 1685	315 316 317		2602 2603	668 669 670		3809 3810	
	1686 1687	318 319 320		2604 2605	671 672 673		3811 3812	
	1688 1689	321 322 323		2606 2607	674 675 676		3813 3815	
	1690 1691	324 325 326		2608 2609	677 678 679		3816 3817	
	1692 1693	327 328 329		2610 2611	680 681 682		3818 3819	
	1694							

Table 50: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T									
664	3821	3822	664	5367	5368	649	164	165	166	1666	1667						
	3823	3824		5372	5373		167	279	280	1668	1669						
	3825	3827		5374 / 415			281	282	283	1670	1671						
	3828	3829		663	581		1061	1	5326	5351	1672	1673					
	3830	3831		1063 / 3			5353	/ 4	287	288	289	1674	1675				
	3833	3834		662	/ 0		1061	/ 1	290	291	292	1676	1677				
	3835	3836		661	1 1061 / 2		571	1049	293	294	295	1678	1679				
	3837	3839					1051	/ 3	296	297	298	1680	1681				
	3840	3841		660	5321		5347	1	5336	5363	299	300	301	1682	1683		
	3842	3843		5375 / 3			5365	/ 4	302	303	304	1684	1685				
	5271	5272		659	566 1045 / 2		581	1061	305	306	307	1686	1687				
	5273	5274					1063	/ 3	308	309	310	1688	1689				
	5275	5276		658	1 / 1		566	1045	/ 2	311	312	313	1690	1691			
	5277	5278		657	561		1039	1	5321	5347	314	315	316	1692	1693		
	5279	5280		1067 / 3			5375	/ 4	317	318	319	1694	1695				
	5281	5282		656	5336		5365	/	561	1039	320	321	322	1696	1697		
	5283	5284		2			1067	/ 3	323	324	325	1698	1699				
	5285	5286		655	1 / 1		5336	5365	/	326	327	328	1702	1703			
	5287	5288					2		329	330	331	1704	1705				
	5289	5290		654	/ 0		1	/ 1	332	333	334	1707	1708				
	5291	5292		653	/ 0		5356	/ 1	335	336	337	1709	1710				
	5293	5294		652	/ 0		3825	/ 1	338	339	340	1711	1713				
	5295	5296		651	3825		5356	/	1040	1041	341	342	343	1714	1715		
	5297	5298		2			1042	/ 3	344	345	346	1716	1717				
	5299	5300		650	/ 0		1701	/ 1	347	348	349	1719	1720				
	5301	5302		649	1		8	9	10	11	962	1013	350	351	352	1721	1722
	5303	5304		12			13	30	31	1018	1023	353	354	355	1723	1725	
	5305	5306		32			33	34	35	1028	1033	356	357	358	1726	1727	
	5307	5308		36			37	38	39	1046	1047	359	360	361	1728	1729	
	5309	5310		40			41	42	43	1048	1064	362	363	364	2536	2537	
	5311	5312		44			45	46	47	1065	1066	365	366	367	2538	2539	
	5313	5314		48			49	50	51	1624	1625	368	369	370	2540	2541	
	5315	5316		52			53	54	55	1626	1627	371	372	373	2542	2543	
	5317	5318		107			108	109	1628	1629	374	375	376	2544	2545		
5319	5320	110		111	112	1630	1631	377	378	379	2546	2547					
5322	5323	113		114	115	1632	1633	380	381	382	2548	2549					
5324	5325	116		117	118	1634	1635	383	384	385	2550	2551					
5326	5327	119		120	121	1636	1637	386	387	388	2552	2553					
5328	5329	122		123	124	1638	1639	389	561	566	2554	2555					
5330	5332	125		126	127	1640	1641	571	576	581	2556	2557					
5333	5334	128		129	130	1642	1643	586	587	588	2558	2559					
5335	5336	131		132	133	1644	1645	589	590	591	2560	2561					
5337	5338	134		135	136	1646	1647	592	593	594	2562	2563					
5339	5340	137		138	139	1648	1649	595	596	597	2564	2565					
5342	5343	140		141	142	1650	1651	598	599	600	2566	2567					
5344	5345	143		144	145	1652	1653	601	602	603	2568	2569					
5348	5349	146		147	148	1654	1655	604	605	606	2570	2571					
5350	5351	149		150	151	1656	1657	607	608	609	2572	2573					
5353	5354	152		153	154	1658	1659	610	611	612	2574	2575					
5355	5356	155		156	157	1660	1661	613	614	615	2576	2577					
5360	5361	158		159	160	1662	1663	616	617	618	2578	2579					
5362	5363	161		162	163	1664	1665	619	620	621	2580	2581					
5365	5366							622	623	624	2582	2583					

Table 51: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
649	625 626 627	2584 2585	649		3791 3792	649		5332 5333
	628 629 630	2586 2587			3793 3794			5334 5335
	631 632 633	2588 2589			3795 3796			5337 5338
	634 635 636	2590 2591			3797 3798			5339 5340
	637 638 639	2592 2593			3799 3800			5342 5343
	640 641 642	2594 2595			3801 3802			5344 5345
	643 644 645	2596 2597			3803 3804			5348 5349
	646 647 648	2598 2599			3805 3806			5350 5354
	649 650 651	2600 2601			3807 3808			5355 5356
	652 653 654	2602 2603			3809 3810			5360 5361
	655 656 657	2604 2605			3811 3812			5362 5366
	658 659 660	2606 2607			3813 3815			5367 5368
	661 662 663	2608 2609			3816 3817			5372 5373
	664 665 666	2610 2611			3818 3819			5374 / 399
	667 668 669	2613 2614			3821 3822	648	/ 0	1 / 1
	670 671 672	2615 2616			3823 3824	647	1 / 1	1147 1148 /
	673 674 675	2617 2619			3825 3827			2
	676 677 678	2620 2621			3828 3829	646	686 691 696	1058 1059
	679 680 681	2622 2623			3830 3831		701 706 761	1060 1087
	682 683 684	2625 2626			3833 3834		962 1028	1088 1089
	685 687 688	2627 2628			3835 3836		1055 / 9	1090 1117
	689 690 692	2629 2631			3837 3839			1118 1119 /
	693 694 695	2632 2633			3840 3841			10
	697 698 699	2634 2635			3842 3843	645	/ 0	962 / 1
	700 702 703	2637 2638			5271 5272	644	962 / 1	1028 1055 /
	704 705 707	2639 2640			5273 5274			2
	708 709 710	2641 3738			5275 5276	643	/ 0	962 / 1
	711 712 713	3739 3740			5277 5278	642	/ 0	761 / 1
	714 715 716	3741 3742			5279 5280	641	/ 0	686 / 1
	717 718 719	3743 3744			5281 5282	640	/ 0	706 / 1
	720 721 722	3745 3746			5283 5284	639	/ 0	691 / 1
	723 724 725	3747 3748			5285 5286	638	/ 0	701 / 1
	726 727 728	3749 3750			5287 5288	637	/ 0	696 / 1
	729 730 731	3751 3752			5289 5290	636	/ 0	1 / 1
	732 733 734	3753 3754			5291 5292	635	1 / 1	1141 1142 /
	735 736 737	3755 3756			5293 5294			2
	738 739 740	3757 3758			5295 5296	634	/ 0	1 / 1
	741 742 743	3759 3760			5297 5298	633	1 686 691	1052 1053
	744 745 746	3761 3762			5299 5300		696 701 706	1054 1081
	747 748 749	3763 3764			5301 5302		761 962 1013	1082 1083
	750 751 752	3765 3766			5303 5304		/ 9	1084 1111
	753 754 755	3767 3768			5305 5306			1112 1113 /
	756 757 758	3769 3770			5307 5308			10
	759 760 1081	3771 3772			5309 5310	632	/ 0	1013 / 1
	1082 1083	3773 3774			5311 5312	631	/ 0	962 / 1
	1084 1087	3775 3776			5313 5314	630	/ 0	761 / 1
	1088 1089	3777 3778			5315 5316	629	/ 0	701 / 1
	1090 1111	3779 3780			5317 5318	628	/ 0	706 / 1
	1112 1113	3781 3782			5319 5320	627	/ 0	696 / 1
	1117 1118	3783 3784			5322 5323	626	/ 0	691 / 1
	1119 1141	3785 3786			5324 5325	625	/ 0	686 / 1
	1142 1147	3787 3788			5327 5328	624	/ 0	1 / 1
	1148 / 398	3789 3790			5329 5330	623	/ 0	561 / 1
						622		1005 1027

Table 52: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
622	1 561 / 2	1029 / 3	594		701 / 1	564		1298 / 7
621	/ 0	576 / 1	593	/ 0	706 / 1	563	/ 0	1587 / 1
620	/ 0	1 / 1	592	/ 0	761 / 1	562	995 / 1	1586 1590 / 2
619	/ 0	571 / 1	591	/ 0	696 / 1	561	/ 0	995 / 1
618	1 576 / 2	1001 1022 1024 / 3	590	/ 0	581 / 1	560	/ 0	761 / 1
617	/ 0	576 / 1	589	/ 0	576 / 1	559	/ 0	686 / 1
616	/ 0	1 / 1	588	/ 0	686 / 1	558	/ 0	691 / 1
615	1 / 1	1025 1026 / 2	587	/ 0	691 / 1	557	/ 0	696 / 1
614	/ 0	1 / 1	586	/ 0	561 / 1	556	/ 0	706 / 1
613	1 1025 1026 / 3	581 1009 1032 1034 / 4	585	/ 0	1 / 1	555	/ 0	701 / 1
612	/ 0	1 / 1	584	1 561 576 581 686 691 696 701 706 761 1165 / 11	969 970 979 980 981 994 995 996 997 1015 1016 1017 / 12	554	/ 0	566 / 1
611	1 / 1	1025 1026 / 2	583	/ 0	1165 / 1	553	/ 0	571 / 1
610	1025 1026 / 2	1 1030 1031 / 3	582	/ 0	971 / 1	552	/ 0	561 / 1
609	1 / 1	1025 1026 / 2	581	/ 0	706 / 1	551	/ 0	576 / 1
608	/ 0	1 / 1	580	/ 0	701 / 1	550	/ 0	581 / 1
607	1 1025 1026 / 3	561 993 1014 1037 / 4	579	/ 0	581 / 1	549	/ 0	510 / 1
606	/ 0	1 / 1	578	/ 0	761 / 1	548	/ 0	1 / 1
605	1 / 1	1035 1036 / 2	577	/ 0	561 / 1	547	/ 0	760 / 1
604	561 571 576 581 686 691 696 1001 1022 1024 1046 1047 1048 1075 1076 1077 1078 1105 1106 1107 1135 1136 / 22	963 964 965 966 967 968 974 975 976 977 978 987 988 989 990 991 992 1006 1007 1008 1010 1011 1012 / 23	576	/ 0	686 / 1	546	/ 0	759 / 1
603	/ 0	686 / 1	575	/ 0	696 / 1	545	1 510 / 2	756 757 758 / 3
602	/ 0	696 / 1	574	/ 0	576 / 1	544	/ 0	510 / 1
601	/ 0	581 / 1	573	/ 0	691 / 1	543	/ 0	1 / 1
600	/ 0	691 / 1	572	/ 0	510 / 1	542	/ 0	754 / 1
599	/ 0	576 / 1	571	576 581 686 691 696 701 706 761 1492 1493 1494 1495 1496 1497 1498 1499 1500 1501 1502 1503 / 20	982 983 998 999 1000 1019 1020 1021 1022 1046 1047 1048 1075 1076 1077 1078 1105 1106 1107 1135 1136 / 21	541	1 754 / 2	705 707 727 / 3
598	/ 0	561 / 1	570	510 561 1255 1256 1257 1278 1279 1280 1297 1298 1311 / 11	1492 1493 1494 1495 1496 1497 1498 1499 1500 1501 1502 1503 / 12	540	510 / 1	681 682 / 2
597	/ 0	1 / 1	569	/ 0	1311 / 1	539	/ 0	510 / 1
596	1 561 576 581 686 691 696 706 761 1018 1045 / 11	972 973 984 985 986 1001 1002 1003 1004 1024 1025 1026 / 12	568	/ 0	1257 / 1	538	/ 0	743 / 1
595	701 / 1	1018 1045 / 2	567	/ 0	581 / 1	537	/ 0	754 / 1
594	/ 0		566	/ 0	510 / 1	536	743 754 / 2	687 710 711 / 3
			565	/ 0	561 / 1	535	571 / 1	661 662 / 2
			564	510 561 581 1586 1587 1590 / 6	1255 1256 1278 1279 1280 1297	534	/ 0	571 / 1
						533	510 571 661 662 681 682 687 705 757 758 759 / 11	708 709 728 729 730 731 743 744 745 746 754 755 / 12
						532	/ 0	571 / 1
						531	/ 0	510 / 1
						530	510 571 / 2	757 758 759 / 3
						529	/ 0	571 / 1
						528	/ 0	510 / 1
						527	510 571 / 2	681 682 705 / 3
						526	/ 0	510 / 1
						525	/ 0	571 / 1
						524	571 576 / 2	661 662 687 / 3
						523	/ 0	571 / 1
						522	/ 0	

Table 53: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
522		576 / 1	483	339 / 1	541 585 / 2	441	355 / 1	667 692 / 2
521	/ 0	683 / 1	482	/ 0	339 / 1	440	/ 0	339 / 1
520	576 / 1	684 685 / 2	481	339 / 1	758 759 / 2	439	339 / 1	557 580 / 2
519	/ 0	576 / 1	480	/ 0	339 / 1	438	557 580 / 2	339 545 567 / 3
518	/ 0	636 / 1	479	339 / 1	545 567 / 2	437	339 / 1	557 580 / 2
517	510 571 576	586 610 611	478	/ 0	339 / 1	436	/ 0	339 / 1
	696 757 758	634 635 658	477	339 / 1	681 705 / 2	435	339 / 1	676 700 / 2
	759 / 7	659 660 / 8	476	/ 0	339 / 1	434	/ 0	339 / 1
516	/ 0	510 / 1	475	339 / 1	667 692 / 2	433	/ 0	355 / 1
515	/ 0	696 / 1	474	/ 0	339 / 1	432	/ 0	510 / 1
514	/ 0	576 / 1	473	/ 0	510 / 1	431	/ 0	696 / 1
513	/ 0	571 / 1	472	/ 0	581 / 1	430	/ 0	576 / 1
512	571 576 / 2	757 758 759 / 3	471	/ 0	701 / 1	429	/ 0	571 / 1
511	/ 0	571 / 1	470	/ 0	696 / 1	428	/ 0	259 / 1
510	/ 0	576 / 1	469	/ 0	571 / 1	427	259 571 / 2	749 750 751 / 3
509	571 576 / 2	541 562 585 / 3	468	/ 0	576 / 1	426	/ 0	571 / 1
508	/ 0	571 / 1	467	/ 0	657 / 1	425	/ 0	389 / 1
507	/ 0	576 / 1	466	576 / 1	609 633 / 2	424	389 / 1	722 739 / 2
506	/ 0	747 / 1	465	/ 0	576 / 1	423	/ 0	389 / 1
505	576 / 1	712 732 / 2	464	/ 0	656 / 1	422	389 / 1	716 735 / 2
504	/ 0	576 / 1	463	/ 0	584 / 1	421	339 355 510	697 698 699
503	/ 0	688 / 1	462	339 510 571	582 583 606		571 576 716	719 720 721
502	510 541 562	689 690 713		576 696 701	607 608 631		735 / 7	737 738 / 8
	571 576 581	714 715 733	461	/ 6	632 / 7	420	/ 0	355 / 1
	585 / 7	734 748 / 8	460	/ 0	339 / 1	419	/ 0	339 / 1
501	/ 0	581 / 1	459	/ 0	701 / 1	418	339 355 541	693 694 695
500	/ 0	510 / 1	458	/ 0	510 / 1		545 557 567	716 717 718
499	/ 0	571 / 1	457	/ 0	571 / 1		580 / 7	735 736 / 8
498	/ 0	576 / 1	456	/ 0	696 / 1	417	/ 0	541 / 1
497	571 576 / 2	541 562 585 / 3	455	571 576 / 2	557 580 605 / 3	416	/ 0	339 / 1
496	/ 0	571 / 1	454	/ 0	571 / 1	415	339 / 1	545 567 / 2
495	/ 0	576 / 1	453	/ 0	576 / 1	414	/ 0	339 / 1
494	571 576 / 2	666 667 692 / 3	452	/ 0	355 / 1	413	339 / 1	671 672 / 2
493	/ 0	571 / 1	451	355 576 / 2	526 542 560 / 3	412	/ 0	389 / 1
492	/ 0	576 / 1	450	/ 0	576 / 1	411	389 / 1	557 580 / 2
491	/ 0	339 / 1	449	/ 0	259 / 1	410	/ 0	389 / 1
490	339 576 / 2	637 638 663 / 3	448	/ 0	259 / 1	409	/ 0	355 / 1
489	/ 0	576 / 1	447	259 / 1	543 544 / 2	408	/ 0	339 / 1
488	/ 0	339 / 1		526 542 543	355 680 704	407	/ 0	510 / 1
487	339 / 1	587 612 / 2		544 560 / 5	726 742 753 / 6	406	/ 0	576 / 1
486	/ 0	339 / 1	446	355 510 557	702 703 723	405	/ 0	571 / 1
485	339 510 541	563 564 565		571 576 580	724 725 740	404	/ 0	343 / 1
	571 576 581	588 589 590		605 / 7	741 752 / 8	403	343 510 / 2	642 643 668 / 3
	585 667 681	591 613 614	445	/ 0	510 / 1	402	/ 0	510 / 1
	692 696 701	615 616 639	444	/ 0	571 / 1	401	/ 0	343 / 1
	705 758 759	640 641 664	443	339 510 545	605 629 630	400	343 / 1	592 617 / 2
	/ 15	665 / 16		567 571 667	653 654 655	399	592 617 / 2	343 669 670 / 3
484	/ 0	339 / 1		692 696 / 8	677 678 679 / 9	398	343 / 1	592 617 / 2
483			442	/ 0	355 / 1	397	/ 0	343 / 1
			441			396		

Table 54: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
396	339 343 355	595 596 619	356	/ 0	557 / 1	328	922 923 924	556 558 559
	510 576 592	620 621 644	355	/ 0	541 / 1		925 926 927	560 583 584
	617 / 7	645 646 / 8	354	/ 0	389 / 1		928 929 930	607 608 609
395	/ 0	339 / 1	353	/ 0	343 / 1		931 / 19	632 633 / 20
394	596 620 621	355 568 569	352	/ 0	347 / 1	327	/ 0	924 / 1
	644 645 646	570 592 593	351	/ 0	351 / 1	326	/ 0	347 / 1
	669 670 / 8	594 617 618	350	/ 0	355 / 1	325	347 / 1	884 923 / 2
		/ 9	349	/ 0	339 / 1	324	/ 0	389 / 1
393	/ 0	510 / 1	348	/ 0	510 / 1	323	389 523 524	882 885 886
392	339 355 389	596 620 621	347	/ 0	259 / 1		525 536 537	887 888 889
	510 545 557	644 645 646	346	259 339 / 2	535 552 554		538 539 540	890 891 922
	580 / 7	669 670 / 8			/ 3		554 555 556	925 926 927
391	/ 0	545 / 1	345	/ 0	339 / 1		558 559 560	928 929 930
390	/ 0	389 / 1	344	/ 0	271 / 1		/ 15	931 / 16
389	389 / 1	549 572 / 2	343	271 / 1	555 556 / 2	322	/ 0	560 / 1
388	/ 0	389 / 1	342	/ 0	271 / 1	321	/ 0	554 / 1
387	389 / 1	557 580 / 2	341	271 / 1	538 558 / 2	320	/ 0	389 / 1
386	/ 0	339 / 1	340	339 343 347	514 515 522	319	/ 0	343 / 1
385	/ 0	389 / 1		351 355 389	523 524 536	318	343 389 922	523 524 525
384	/ 0	355 / 1		/ 6	537 / 7		923 925 926	536 537 538
383	/ 0	343 / 1	339	/ 0	389 / 1		927 928 929	539 540 555
382	/ 0	510 / 1	338	/ 0	351 / 1		930 931 / 11	556 558 559
381	/ 0	576 / 1	337	351 389 892	511 512 513			/ 12
380	/ 0	259 / 1		894 895 896	516 517 518	317	/ 0	922 / 1
379	259 510 / 2	651 652 675		897 898 899	519 520 521	316	/ 0	923 / 1
		/ 3		900 901 932	525 526 527	315	525 539 540	925 926 927
378	/ 0	510 / 1		933 935 936	528 529 530		558 559 560	928 929 930
377	/ 0	351 / 1		937 938 939	531 532 533		/ 6	931 / 7
376	351 / 1	673 674 / 2		940 941 942	534 539 540	314	/ 0	525 / 1
375	/ 0	351 / 1		943 944 945	542 543 544	313	/ 0	560 / 1
374	351 / 1	647 648 / 2		946 947 948	546 547 548	312	/ 0	558 / 1
373	/ 0	351 / 1		949 950 951	550 551 559	311	/ 0	559 / 1
372	339 343 351	600 601 624		/ 30	560 / 31	310	768 / 1	539 540 / 2
	355 389 510	625 626 649	336	/ 0	263 / 1	309	/ 0	768 / 1
	/ 6	650 / 7	335	263 / 1	932 942 / 2	308	/ 0	389 / 1
371	/ 0	389 / 1	334	932 942 / 2	263 892 944	307	/ 0	343 / 1
370	/ 0	339 / 1			/ 3	306	/ 0	347 / 1
369	/ 0	355 / 1	333	263 / 1	932 942 / 2	305	/ 0	267 / 1
368	339 355 389	577 578 579	332	523 524 525	894 895 896	304	/ 0	263 / 1
	545 549 572	602 603 604		536 537 538	897 898 899	303	/ 0	339 / 1
	647 / 7	627 628 / 8		539 540 554	900 901 933	302	/ 0	271 / 1
367	/ 0	545 / 1		555 556 557	935 936 937	301	/ 0	228 / 1
366	/ 0	647 / 1		558 559 560	938 939 940	300	/ 0	351 / 1
365	/ 0	389 / 1		582 583 584	941 943 945	299	/ 0	275 / 1
364	389 / 1	549 572 / 2		607 608 609	946 947 948	298	/ 0	355 / 1
363	/ 0	389 / 1		632 633 / 23	949 950 951	297	/ 0	259 / 1
362	389 / 1	553 575 / 2			/ 24	296	/ 0	320 / 1
361	/ 0	389 / 1	331	/ 0	554 / 1	295	/ 0	319 / 1
360	/ 0	355 / 1	330	/ 0	343 / 1	294	/ 0	358 / 1
359	/ 0	339 / 1	329	343 / 1	557 582 / 2	293	271 / 1	340 359 / 2
358	339 355 389	597 599 622	328	882 884 885	523 524 525	292	/ 0	271 / 1
	/ 3	623 / 4		886 887 888	536 537 538	291	/ 0	299 / 1
357	541 557 / 2	573 574 598		889 890 891	539 540 555	290	/ 0	279 / 1
		/ 3				289		

Table 55: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
289	267 271 320	298 317 318	255		137 / 1	238	1007 1008	309 310 311
	340 347 351	336 337 338	254	137 / 1	335 354 / 2		1010 1011	312 313 314
	359 / 7	356 357 / 8	253	/ 0	137 / 1		1012 1624	315 316 325
288	/ 0	351 / 1	252	137 / 1	386 387 / 2		1625 1626	326 327 328
287	/ 0	267 / 1	251	/ 0	137 / 1		1627 1628	329 330 331
286	/ 0	271 / 1	250	137 / 1	247 264 / 2		1629 1630	332 333 334
285	/ 0	347 / 1	249	/ 0	137 / 1		1631 1632	345 346 347
284	271 347 / 2	320 340 359	248	137 / 1	244 278 / 2		1633 1634	348 349 350
		/ 3	247	/ 0	137 / 1		1635 1636	351 352 353
283	/ 0	347 / 1	246	/ 0	267 / 1		1637 1638	363 364 365
282	228 267 275	260 261 262	245	/ 0	347 / 1		1639 1640	366 367 368
	343 347 351	280 281 282	244	137 244 278	265 266 284		1641 1642	369 370 377
	389 / 7	300 301 / 8		335 347 354	285 286 304		1643 1644	378 379 380
281	/ 0	343 / 1		/ 6	305 / 7		1645 1646	381 / 148
280	343 / 1	244 278 / 2	243	/ 0	137 / 1		1647 1648	
279	/ 0	343 / 1	242	137 386 387	244 278 335		1649 1650	
278	/ 0	389 / 1		/ 3	354 / 4		1651 1652	
277	/ 0	275 / 1	241	/ 0	137 / 1		1653 1654	
276	/ 0	228 / 1	240	137 / 1	386 387 / 2		1656 1657	
275	/ 0	351 / 1	239	/ 0	137 / 1		1658 1660	
274	/ 0	267 / 1	238	244 247 260	8 9 10 11 12		1661 1662	
273	/ 0	347 / 1		261 262 264	13 30 31 32		1664 1665	
272	/ 0	271 / 1		265 266 278	33 34 35 36		1666 1668	
271	228 267 271	283 302 303		510 511 512	37 38 39 40		1669 1670	
	275 347 351	321 322 323		513 514 515	41 42 43 44		1672 1673	
	389 / 7	341 342 / 8		516 517 518	45 46 47 48		1674 / 147	
270	244 278 / 2	247 264 389		519 520 521	49 50 51 52	237	/ 0	1624 / 1
		/ 3		522 523 524	53 54 55 107	236	/ 0	1 / 1
269	389 / 1	244 278 / 2		525 526 527	108 109 110	235	1 8 9 10 11	510 511 512
268	/ 0	228 / 1		528 529 530	111 112 113		12 13 30 31	513 514 515
267	/ 0	389 / 1		531 532 533	114 115 116		32 33 34 35	516 517 518
266	/ 0	275 / 1		534 535 536	117 118 119		36 37 38 39	519 520 521
265	/ 0	267 / 1		537 538 539	120 121 122		40 41 42 43	522 523 524
264	/ 0	351 / 1		540 542 543	123 124 125		44 45 46 47	525 526 527
263	228 244 247	360 361 362		544 546 547	126 127 128		48 49 50 51	528 529 530
	264 267 275	373 374 375		548 550 551	129 130 131		52 53 54 55	531 532 533
	278 351 / 8	376 384 385		552 554 555	132 133 134		107 108 109	534 535 536
		/ 9		556 558 559	135 136 138		110 111 112	537 538 539
262	/ 0	137 / 1		560 962 963	139 140 141		113 114 115	540 542 543
261	137 360 361	228 229 230		964 965 966	142 143 144		116 117 118	544 546 547
	362 373 374	234 235 236		967 968 969	145 146 147		119 120 121	548 550 551
	375 376 384	244 245 246		970 971 972	148 149 150		122 123 124	552 554 555
	385 389 / 11	247 264 278		973 974 975	151 152 153		125 126 127	556 558 559
		/ 12		976 977 978	154 155 156		128 129 130	560 962 963
260	/ 0	389 / 1		979 980 981	157 158 159		131 132 133	964 965 966
259	228 229 230	360 361 362		982 983 984	160 161 162		134 135 136	967 968 969
	234 235 236	371 372 373		985 986 987	163 164 165		137 138 139	970 971 972
	244 245 246	374 375 376		988 989 990	166 167 271		140 141 142	973 974 975
	247 264 278	383 384 385		991 992 994	275 287 288		143 144 145	976 977 978
	/ 12	388 / 13		995 996 998	289 290 291		146 147 148	979 980 981
258	/ 0	382 / 1		999 1000	292 293 294		149 150 151	982 983 984
257	/ 0	137 / 1		1002 1003	295 296 297		152 153 154	985 986 987
256	137 / 1	324 344 / 2		1004 1006	306 307 308		155 156 157	988 989 990
255	/ 0							

Table 56: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
235	158 159 160	991 992 994	216	244 324 331	276 277 296	192	978 979 980	160 161 162
	161 162 163	995 996 998		/ 3	297 / 4		981 982 983	163 164 165
	164 165 166	999 1000	215	/ 0	331 / 1		984 985 986	166 167 267
	167 267 271	1002 1003	214	/ 0	324 / 1		987 988 989	284 285 286
	275 280 281	1004 1006	213	/ 0	244 / 1		990 991 992	287 288 289
	284 285 286	1007 1008	212	/ 0	137 / 1		994 995 996	304 305 306
	287 288 289	1010 1011	211	137 / 1	327 328 / 2		998 999 1000	307 308 325
	290 291 292	1012 1625	210	/ 0	167 / 1		1002 1003	326 / 106
	293 294 295	1626 1627	209	167 / 1	256 274 / 2		1004 1006	
	296 297 304	1628 1629	208	/ 0	149 / 1		1007 1008	
	305 306 307	1630 1631	207	149 / 1	247 264 / 2		1010 1011	
	308 309 310	1632 1633	206	/ 0	149 / 1		1012 / 105	
	311 312 313	1634 1635	205	/ 0	167 / 1	191	/ 0	962 / 1
	314 315 316	1636 1637	204	/ 0	137 / 1	190	/ 0	1 / 1
	325 326 327	1638 1639	203	/ 0	271 / 1	189	1 962 / 2	101 270 272
	328 329 330	1640 1641	202	137 149 167	272 273 291			/ 3
	331 332 333	1642 1643		247 264 327	292 293 311	188	/ 0	1 / 1
	334 / 136	1644 1645		328 / 7	312 330 / 8	187	1 8 9 10 11	253 256 268
		1646 1647	201	/ 0	149 / 1		12 13 30 31	269 273 274
		1648 1649	200	149 / 1	327 328 / 2		32 33 34 35	276 277 278
		1650 1651	199	244 324 327	290 309 310		36 37 38 39	510 511 512
		1652 1653		/ 3	329 / 4		40 41 42 43	513 514 515
		1654 1656	198	/ 0	244 / 1		44 45 46 47	516 517 518
		1657 1658	197	/ 0	324 / 1		48 49 50 51	519 520 521
		1660 1661	196	/ 0	327 / 1		52 53 54 55	522 523 524
		1662 1664	195	/ 0	167 / 1		101 107 108	525 526 527
		1665 1666	194	167 / 1	247 264 / 2		109 110 111	528 529 530
		1668 1669	193	/ 0	149 / 1		112 113 114	531 532 533
		1670 1672	192	244 247 256	8 9 10 11 12		115 116 117	534 535 536
		1673 1674 /		260 261 262	13 30 31 32		118 119 120	537 538 539
		137		264 272 273	33 34 35 36		121 122 123	540 542 543
234	/ 0	167 / 1		274 276 277	37 38 39 40		124 125 126	544 546 547
233	167 / 1	327 328 / 2		278 510 511	41 42 43 44		127 128 129	548 550 551
232	324 327 328	260 261 262		512 513 514	45 46 47 48		130 131 132	552 554 555
	335 / 4	280 281 / 5		515 516 517	49 50 51 52		133 134 135	556 558 559
231	/ 0	335 / 1		518 519 520	53 54 55 107		136 137 138	560 962 963
230	/ 0	324 / 1		521 522 523	108 109 110		139 140 141	964 965 966
229	/ 0	167 / 1		524 525 526	111 112 113		142 143 144	967 968 969
228	167 / 1	327 328 / 2		527 528 529	114 115 116		145 146 147	970 971 972
227	/ 0	167 / 1		530 531 532	117 118 119		148 149 150	973 974 975
226	167 / 1	331 332 / 2		533 534 535	120 121 122		151 152 153	976 977 978
225	/ 0	167 / 1		536 537 538	123 124 125		154 155 156	979 980 981
224	167 / 1	244 278 / 2		539 540 542	126 127 128		157 158 159	982 983 984
223	/ 0	167 / 1		543 544 546	129 130 131		160 161 162	985 986 987
222	167 / 1	247 264 / 2		547 548 550	132 133 134		163 164 165	988 989 990
221	/ 0	137 / 1		551 552 554	135 136 137		166 167 280	991 992 994
220	/ 0	167 / 1		555 556 558	138 139 140		281 284 285	995 996 998
219	137 167 244	275 294 295		559 560 962	141 142 143		300 / 100	999 1000
	247 264 278	313 314 315		963 964 965	144 145 146			1002 1003
	327 328 / 8	316 333 334		966 967 968	147 148 150			1004 1006
		/ 9		969 970 971	151 152 153			1007 1008
218	/ 0	167 / 1		972 973 974	154 155 156			1010 1011
217	167 / 1	244 278 / 2		975 976 977	157 158 159			1012 / 101
216						186	/ 0	

Table 57: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T
186		300 / 1	163		439 / 1	119	/ 0	110 / 1
185	/ 0	167 / 1	162	/ 0	140 / 1	118	/ 0	85 / 1
184	167 253 256	260 261 262	161	140 / 1	464 470 / 2	117	/ 0	84 / 1
	304 / 4	280 281 / 5	160	464 / 1	472 473 / 2	116	/ 0	78 / 1
183	/ 0	256 / 1	159	439 / 1	469 471 / 2	115	/ 0	24 / 1
182	/ 0	244 / 1	158	/ 0	464 / 1	114	24 / 1	102 116 / 2
181	/ 0	253 / 1	157	/ 0	439 / 1	113	/ 0	24 / 1
180	/ 0	304 / 1	156	/ 0	167 / 1	112	24 / 1	144 156 / 2
179	/ 0	167 / 1	155	167 / 1	440 463 / 2	111	/ 0	130 / 1
178	167 390 391	229 230 231	154	241 242 243	438 441 442	110	102 156 / 2	131 145 146
	392 393 394	232 233 234		254 255 257	443 462 465			/ 3
	395 414 415	235 236 237		258 / 7	466 467 / 8	109	/ 0	102 / 1
	416 417 418	238 239 240	153	486 487 488	241 242 243	108	/ 0	156 / 1
	419 438 439	241 242 243		489 490 491	254 255 257	107	/ 0	24 / 1
	440 441 442	245 246 247		/ 6	258 / 7	106	24 / 1	77 81 / 2
	443 462 463	248 249 250	152	/ 0	486 / 1	105	/ 0	89 / 1
	464 465 466	251 252 254	151	/ 0	487 / 1	104	76 77 78 79	8 9 10 11 12
	467 486 487	255 257 258	150	241 254 255	488 489 490		80 81 84 85	13 30 31 32
	488 489 490	264 265 266		/ 3	491 / 4		86 87 88 89	33 34 35 36
	491 / 31	284 285 / 32	149	/ 0	255 / 1		96 97 99 100	37 38 39 40
177	/ 0	228 / 1	148	/ 0	241 / 1		102 228 229	41 42 43 44
176	228 229 230	390 391 392	147	/ 0	254 / 1		230 231 232	45 46 47 48
	231 232 233	393 394 395	146	/ 0	167 / 1		233 234 235	49 50 51 52
	234 235 236	414 415 416	145	/ 0	137 / 1		236 237 238	53 54 55 104
	237 238 239	417 418 419	144	/ 0	149 / 1		239 240 241	107 108 109
	240 241 242	438 439 440	143	/ 0	146 / 1		242 243 244	117 118 119
	243 244 245	441 442 443	142	/ 0	104 / 1		245 246 248	120 121 122
	246 248 249	462 463 464	141	/ 0	92 / 1		249 251 252	123 124 132
	251 252 253	465 466 467	140	/ 0	140 / 1		254 255 257	133 134 135
	254 255 256	486 487 488	139	/ 0	143 / 1		258 510 511	136 137 138
	257 258 / 29	489 490 491	138	/ 0	95 / 1		512 513 514	139 147 148
		/ 30	137	/ 0	76 / 1		515 516 517	149 150 151
175	/ 0	253 / 1	136	/ 0	98 / 1		518 519 520	152 153 154
174	/ 0	244 / 1	135	/ 0	101 / 1		521 522 523	155 157 158
173	/ 0	256 / 1	134	92 95 104	99 100 113		524 525 526	159 160 161
172	/ 0	167 / 1		137 149 167	114 115 128		527 528 530	162 163 164
171	/ 0	149 / 1		/ 6	129 / 7		531 533 534	165 166 167
170	/ 0	146 / 1	133	/ 0	167 / 1		536 537 539	/ 72
169	/ 0	143 / 1	132	140 146 167	80 86 87 88 /		540 / 71	
168	143 146 149	228 229 230		/ 3	4	103	8 12 30 31 38	5 6 17 18 23
	167 438 440	231 232 233	131	/ 0	79 / 1		39 40 48 49	24 25 26 27
	441 442 443	234 235 236	130	/ 0	140 / 1		107 108 109	76 79 80 85
	462 463 464	237 238 239	129	140 / 1	102 116 / 2		119 120 121	86 87 88 89
	465 466 467	240 241 242	128	/ 0	104 / 1		122 123 134	96 97 99 100
	469 470 471	243 245 246	127	104 / 1	97 112 / 2		135 136 149	102 103 228
	472 473 486	248 249 251	126	/ 0	140 / 1		150 151 259	229 230 231
	487 489 490	252 254 255	125	97 102 116 /	126 127 141		260 261 277	232 233 236
	491 / 25	257 258 / 26		3	142 / 4		278 279 280	237 238 239
167	/ 0	137 / 1	124	/ 0	97 / 1		281 296 297	240 241 242
166	137 / 1	487 489 / 2	123	/ 0	95 / 1		298 299 300	248 249 251
165	439 468 / 2	486 490 491	122	95 / 1	102 116 / 2		316 317 318	252 254 255
		/ 3	121	/ 0	95 / 1		336 337 338	510 511 512
164	/ 0	468 / 1	120	102 116 / 2	96 111 125 /		541 542 543	513 514 515
163	/ 0				3			

Table 58: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T	n	On / T	Off / T	
103	559 560 561	516 517 518	95	153 / 4	152 161 / 5	77	88 89 90 91	37 38 39 40	
	562 563 584	519 520 521	94	/ 0	88 / 1		93 94 95 96	41 43 44 45	
	585 586 587	522 523 524	93	112 126 127	135 138 139		97 99 100	46 47 48 49	
	588 608 609	525 528 530		/ 3	153 / 4		102 103 105	50 51 52 53	
	610 611 612	531 533 534	92	88 135 / 2	112 126 127		106 228 229	54 55 174	
	633 634 635	536 537 539			/ 3		230 231 232	175 176 177	
	659 660 / 65	/ 66	91	/ 0	125 / 1		233 234 235	178 179 204	
102	/ 0	149 / 1	90	/ 0	135 / 1		236 237 238	205 206 207	
101	5 6 9 10	119 134 234	89	/ 0	88 / 1		239 240 241	208 209 216	
	11 13 17 18	235 243 244	88	/ 0	55 / 1		242 243 245	217 218 219	
	23 24 25 26	245 246 257	87	55 / 1	90 105 / 2		246 247 248	220 221 222	
	27 32 33 34	258 259 260	86	105 125 135	76 80 81 89 /		249 251 252	223 224 225	
	35 36 37 41	261 277 278		/ 3	4		254 255 257	226 227 / 55	
	42 43 44 45	279 280 281	85	168 169 170	77 78 79 82		258 / 54		
	46 47 50 51	296 297 298		171 172 173	83 84 85 86	76	/ 0	247 / 1	
	52 53 54 55	299 300 316		174 175 176	87 91 92 93	75	/ 0	95 / 1	
	76 79 80 85	317 318 336		177 178 179	94 95 96 97	74	8 9 10 11 12	77 78 79 80	
	86 87 88 89	337 338 526		180 181 182	105 106 107		13 30 31 32	81 82 83 84	
	95 96 97 110	527 540 541		183 184 185	108 109 110		33 34 35 36	85 86 87 88	
	111 124 125	542 543 559		186 187 188	111 120 121		37 38 39 40	89 90 91 93	
	137 138 139	560 561 562		189 190 191	122 123 124		41 42 43 44	94 96 97 99	
	152 153 161	563 584 585		216 217 218	125 135 136		45 46 47 48	100 102 103	
	162 / 54	586 587 588		219 220 221	/ 31		49 50 51 52	105 106 228	
		608 609 610		/ 30			53 54 55 168	229 230 231	
		611 612 633	84	89 90 91 103	168 169 170		169 170 180	232 233 234	
		634 635 659		104 105 106	171 172 173		181 182 192	235 236 237	
		660 / 55		107 108 117	174 175 176		193 194 195	238 239 240	
100	/ 0	162 / 1		118 119 120	177 178 179		196 197 204	241 242 243	
99	/ 0	88 / 1		121 122 132	180 181 182		205 206 216	245 246 248	
98	390 391 392	10 11 13 26		133 134 135	183 184 185		217 218 / 50	249 251 252	
	393 394 395	34 35 36 37		136 147 148	186 187 188			254 255 257	
	397 398 399	42 43 44 45		149 150 151	189 190 191			258 / 51	
	400 401 414	46 47 48 50		159 160 161	216 217 218		73	/ 0	195 / 1
	415 417 418	51 52 53 54		166 / 29	219 220 221		72	240 / 1	196 197 / 2
	419 486 488	55 125 135			/ 30		71	/ 0	240 / 1
	489 490 491	137 138 139	83	81 102 / 2	107 108 122		70	/ 0	76 / 1
	516 526 527	150 151 152			/ 3		69	/ 0	55 / 1
	542 543 563	153 161 / 31	82	/ 0	151 / 1		68	55 76 / 2	182 193 194
	564 767 770		81	174 175 176	81 89 90 91			/ 3	
	/ 30			177 178 179	102 103 105		67	182 / 1	76 192 / 2
97	10 11 13 26	390 391 392		204 205 206	106 117 118		66	/ 0	205 / 1
	34 35 36 37	393 394 395		207 208 209	119 120 121		65	184 185 / 2	204 206 217
	42 43 44 45	397 398 399		216 217 218	132 133 134			/ 3	
	46 47 48 50	400 401 414		219 220 221	135 136 147		64	217 / 1	184 185 / 2
	51 52 53 54	415 417 418		222 223 224	148 150 159		63	/ 0	182 / 1
	55 135 137	419 486 488		225 226 227	160 161 166		62	/ 0	217 / 1
	138 150 151	489 490 491		/ 24	/ 25		61	217 / 1	180 181 / 2
	152 153 161	516 526 527	80	/ 0	104 / 1		60	/ 0	170 / 1
	/ 29	542 543 563	79	/ 0	149 / 1		59	/ 0	217 / 1
		564 767 770	78	/ 0	42 / 1		58	170 / 1	216 218 / 2
		/ 30	77	76 77 78 79	8 9 10 11 12		57	/ 0	170 / 1
96	/ 0	153 / 1		80 81 82 83	13 30 31 32		56	83 / 1	168 169 / 2
95	88 125 139	137 150 151		84 85 86 87	33 34 35 36		55	/ 0	83 / 1
							54	/ 0	

Table 59: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T	n	On / T	Off / T
54		55 / 1	28		72 / 1
53	/ 0	44 / 1	27	/ 0	20 / 1
52	/ 0	46 / 1	26	20 72 / 2	48 74 75 / 3
51	/ 0	26 / 1	25	/ 0	60 / 1
50	55 / 1	35 45 / 2	24	/ 0	22 / 1
49	/ 0	36 / 1	23	/ 0	61 / 1
48	/ 0	28 / 1	22	/ 0	40 / 1
47	/ 0	37 / 1	21	/ 0	63 / 1
46	/ 0	27 / 1	20	/ 0	62 / 1
45	/ 0	24 / 1	19	/ 0	59 / 1
44	/ 0	25 / 1	18	/ 0	20 / 1
43	/ 0	34 / 1	17	60 / 1	57 58 / 2
42	/ 0	18 / 1	16	/ 0	60 / 1
41	/ 0	14 / 1	15	/ 0	56 / 1
40	/ 0	17 / 1	14	/ 0	72 / 1
39	/ 0	19 / 1	13	/ 0	73 / 1
38	77 78 82 83	1 2 3 4 5 6 7	12	/ 0	13 / 1
	84 93 94 229	8 9 10 11 12	11	/ 0	9 / 1
	230 234 235	13 15 16 20	10	/ 0	8 / 1
	236 244 245	21 22 23 29	9	/ 0	10 / 1
	246 247 260	30 31 32 33	8	/ 0	12 / 1
	261 262 516	38 39 40 41	7	/ 0	11 / 1
	517 518 526	42 43 47 48	6	11 68 / 2	3 4 6 / 3
	527 528 529	49 50 51 52	5	6 / 1	11 68 / 2
	542 543 544	53 54 55 / 39	4	/ 0	5 / 1
	563 564 979		3	/ 0	1 / 1
	980 994 995		2	/ 0	6 / 1
	996 1015				
	1016 / 38				
37	1 2 3 4 5 6 7	77 78 82 83			
	8 9 10 11 12	84 93 94 229			
	13 16 21 22	230 234 235			
	23 30 31 32	236 244 245			
	33 34 38 39	246 247 260			
	40 41 42 43	261 262 516			
	47 48 49 50	517 518 526			
	51 52 53 54	527 528 529			
	55 / 37	542 543 544			
		563 564 979			
		980 994 995			
		996 1015			
		1016 / 38			
36	/ 0	34 / 1			
35	/ 0	16 / 1			
34	45 / 1	22 23 / 2			
33	/ 0	21 / 1			
32	/ 0	45 / 1			
31	/ 0	33 / 1			
30	20 56 57 58	30 31 32 38			
	59 61 62 63	39 41 43 47			
	66 67 72 73	49 50 51 52			
	74 75 / 14	53 54 55 / 15			
29	22 60 / 2	42 66 67 / 3			
28	/ 0				

Table 60: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

7 Conclusions and future work

All the details of the construction of the IF9483 and MIF1739 are not given here but in a later article. Our first option was to build only Ω^o from Proposition 3 but it was not as regular and symmetrical as IF. IF was the lattice that close the gap of Northby's statement [17] in a regular, elegant and symmetrical lattice but hot. It seems that Proposition 1 is focus in build arbitrary sets from arbitrary points, that can be obtained from the separable points of \mathbb{R}^3 under BU or LJ. However, IF came naturally from using the C_{13}^* as the seed. Of course, there could be other sets or lattices without such motifs but IF joints in one framework the well know IC and FC and all the know optimal clusters. Also, in the set Ω^l of the Proposition 2 is not necessary a minimization procedure for any cluster. This gives a witness property for the optimality verification in the neighborhood of a cluster in polynomial time. Depicting the components of the gradient of the potential on each particle helps to understand the deformation of the PES for small clusters, but it need further study. Proposition 2 permits see SOCDXX as the Traveling Salesman Problem in Ω^o and let to have a framework to analyze the complexity of SOCDXX where XX is BU or LJ. An open question is: Are there similar results for Kihara or Morse Potentials? Here the obstacle is that there is not strong rejection when $r \rightarrow 0$ and this does not allow to have separate points. Moreover: Is C_{13}^* the global minimum? In my opinion it is possible to answer by a combination of an exhaustive search and by the symmetrical properties of IF, and if it is possible that such proposition could be proved by using a computer to explore in wise fashion the local optimal clusters of 13 particles in IF. Maybe in similar way to the proof of the Four-Color Theorem. Other conjecture open by this work is: Are all the optimal cluster under LJ or for equivalent potentials in IF? The answer of this conjecture does not change the results of my propositions, it is clear that if there are new cases, these can be added without problem but IF will possibly lose the beautiful minimum combination of IC and FC. In the case, of huge clusters it is possible that other lattices could be added to IF with other geometrical motifs.

Finally, this novel formulation brings new perspectives for NP's complexity and will be extended in the future to other potential functions.

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