

GIZEM INCI

12.09.2012 - 14.09.2012

Completed Tasks

1. Collision exception code
 - Detect the particle collisions
2. DLA Script
 - First particle is placed in the simulation box
 - Second particle is placed at random place far away from the first particle
 - The other particles are randomly placed just after the one before collides and sticks to an agglomerate

First Results

1. Box length is $25 * \sigma$
2. P1 is placed at the middle of the box and fixed
3. The initial position of all other particles is 0,0,0

Problem

1. Virtual particles do not create bond (Solved)
2. The virtual particles are created with particle ids one after the current real particles, the center of mass of agglomerates are calculated wrong (Solved)

Table 1: Simulation results

Longest Dist	N of Particles	Df circle radius	N of Particles Circle	Radius of Gyration
9.970	63	0.5	0	2.91187
9.970	63	2	15	2.91187
9.970	63	3.5	49	2.91187
9.970	63	5.0	62	2.91187
9.970	63	6.5	63	2.91187
9.970	63	8.0	63	2.91187