

Definitions

Cutting plane – an imaginary plane which is used to cut the scene in the 3D scene view. The object will be hidden if its center does not satisfy conditions (is not situated between planes). The three different cutting planes can be defined as: X, Y or Z. X plane is a plane which has constant X coordinate and parallel to plane YZ. These planes can also be configured to cut at a constant Y and Z and not necessarily (0, 0). Y and Z planes are defined similarly.

Cutting geometry – to cut the view (similar to cutting plane) the analysis volumes can be used. Object will be shown if its center is situated in the closed region of specified volume. Can choose, which of the analysis and real geometries to cut with the plane, and which ones to exclude.

Geometry – describes geometrical objects and consists of triangles. There exist two types of geometries: real and analysis. *Analysis volume* is used only for results post-processing, therefore there is no contact between particles and analysis volume. Contrary to this the real volume has specified material. Each geometry can have a list of time dependent properties. The real volume is solid volume, whereas particles can only be generated in analysis volumes, which need to be simulated.

Objects generator – used for dynamic generation of primary particles or agglomerates (new objects can appear on the scene).

Simulation domain - box shaped region where simulation is performed. All particles which are not situated in this volume or leave this volume (due collision, contacts, etc.) are removed from the scene and will not calculated further. Therefore, the simulation domain should be defined to be large enough. However, increase of simulation domain leads to the increase of time needed for calculations.

Collision – occurs during the contact of different physical objects with each other on the scene.