

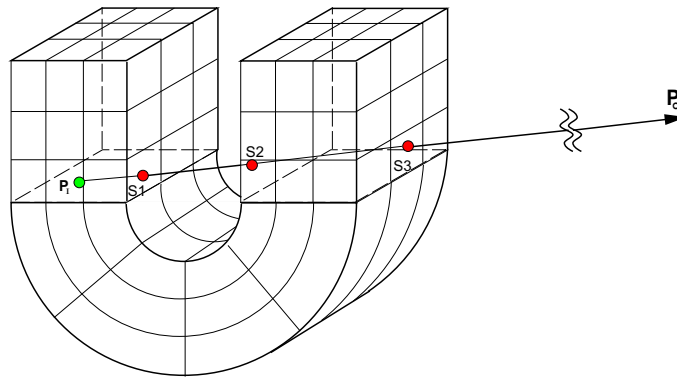
Particle localization on the numerical grid

On regular, orthogonal grids \implies comparison of point coordinates :

$$x_{i-1} \leq x_{PI} \leq x_i, \quad y_{j-1} \leq y_{PI} \leq y_j, \quad z_{k-1} \leq z_{PI} \leq z_k$$

On complex, 3-dimensional grids :

Method a) : 'single-shot' approach



P_I lies inside the grid substructure, if the number of intersections is odd

Method b) : CV decomposition in tetrahedrons

