

Principle

After a collision happened for a pair of particles (i, j) , the same pair should not collide again until one of i and j collides with some other particle.

Each particle should carry the ID of the last experienced collision. $CID(i)$

- Initialize $CID(:)$ at the beginning of each event.

$CID(:) = -1$

- When a collision occurred, a collision ID is generated, which can be a random number. The collision ID's of the collided particles are updated by this new collision ID.

call `random_number(CID(i))`

$CID(j) = CID(i)$

- Two particles carrying the same collision ID do not attempt collisions.

if $(CID(i).ge.0 .and. CID(i).eq.CID(j))$ cycle ! don't attempt a collision