

How do I set the minimum tracking distance using Geant4 commands

Geant4 employs the concept of minimum tracking distance, whereby secondary particles such as electrons are not produced if they would travel less than this distance. The total energy of the track is still decremented in order to preserve energy. The default minimum tracking distance is 1 mm.

There are several built-in Geant4 commands for setting the minimum tracking distance.

The default cut can be set, which will affect the entire simulation.

```
/run/setCut 0.1 mm
```

Alternately, the cuts for individual regions can be customized.

```
/run/setCutForRegion EcalRegion 0.1 mm
```