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Subject: Re: Bremsstrahlung and geant  
Posted by [asanchez](#) on Thu, 07 Oct 2010 09:37:57 GMT  
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So coming back to the issue of the  
Bremsstrahlung processes by electrons.

If i have well understood, in geant4/3 electrons are treated as mother particle(primary or secondary) losing energy according with the Bremsstrahlung process and emitting photons.

So the electron in MCtrack should remain as mother particle and the photons are treated as secondaries.

To check that,  
use the following

for example the pdgcode of the mother and daughter particles  
in geant4

From your MC information  
PndEmcPoint \* pop;

```
PndMCTrack* moc=(PndMCTrack*)fMcTr->At(pop->GetTrackID());
```

```
if(moc==0)continue;
```

```
MotherId= moc->GetMotherID();
```

```
if (MotherId==-1)Motherpdg = moc->GetPdgCode(); // case electron as primary mother  
else {  
PndMCTrack *mother =(PndMCTrack*)fMcTr->At(MotherId); // case electron as secondary  
mother
```

```
Motherpdg = mother->GetPdgCode();  
}
```

See :

[http://geant4.cern.ch/G4UsersDocuments/UsersGuides/PhysicsReferenceManua  
l/html/node42.html#SECTION04422000000000000000](http://geant4.cern.ch/G4UsersDocuments/UsersGuides/PhysicsReferenceManua<br/>l/html/node42.html#SECTION04422000000000000000)

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