
Subject: Bremsstrahlung treatment in GEANE: how to go back to the original code.

Posted by [Lia Lavezzi](#) on Mon, 06 Feb 2012 16:51:38 GMT

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Hi all,

as promised this morning during the EVO meeting, here are the instructions to go back to the original code of GEANE, removing the changes made to treat the Bremsstrahlung. A detailed and complete treatment of the Bremsstrahlung is under development and will be delivered when ready.

Instructions:

the modifications are in `external_packages/transport/geant3/erdecks/erland.F`. The following lines should be all commented out (L. 171-188):

```
C
C inclusion of bremsstrahlung fluctuations DEDXB for electrons
C 22.09.2008 by Alberto Rotondi
C
  IF(XMASS.LT.0.6E-3) THEN
    LX = 1.442695*STEP/RADL
c   EMB=E/(2**LX)
    DEDXB = 0.
c   correction by A. Rotondi and L. Lavezzi to prevent FPE (15/03/2010)
    IF(LX.LT.25) THEN
      S2B=E*E*(1/3**LX - 1/4**LX)
      SB=SQRT(ABS(S2B))
      DEDXB = 1.2*SB
    ENDIF
c   end

    DEDX2 = DEDX2 + DEDXB**2
  ENDIF
```

After this, you just have to do "make" in `external_packages/transport/geant3` to recompile geant3.

This should allow you to work with the original code, if you want to test it. If you encounter any problem, please let me know.

Cheers,
Lia.

P.S.: in attachment you can find the file `erland.F` with the lines already commented out: if you prefer, you can just take it and put it in `external_packages/transport/geant3/erdecks/` instead of editing the file yourself. Please, remember to recompile geant3 after this.

File Attachments

1) [erland.F](#), downloaded 289 times
