Subject: Re: NeuLAND tracking algorithm
Posted by C. A. Douma on Wed, 16 Mar 2016 15:45:30 GMT
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Dear Mr. Kresan,

Thank you for the explanation. It took me some time to get through all the macros (hence the late reply).
I can understand most of it, but I have a few questions about the calibration of the cuts (calibr.C):

1) I see that there are 2 versions of the calibration macro: calibr.C and calibr_mini.C
Is one of them better then the other (regarding the physics), or is the difference just code optimization?
In Jan Mayers talk from last NUSTASR week I also see a difference in efficiency between calibr.C and calibr_mini.C
What is the meaning of this?

2) What is the physics behind 'kappa'?

3) calibr.C has a few flaws on my computer. It returns kappa=0 on my computer and no cuts (with the second function).
Could this be caused by the fact that the histogram boundaries are too small for 4n? Or did I miss something else?

4) The calibration text file that comes out of the macro is just a small list of numbers. What is the meaning of those numbers?

5) I used the NeuLandDigitizer from Jan Mayer, not the LandDigitizer (which was suggested in precalibr.C).
Is this the right way or should I use the LandDigitizer?

6) For the R3BNeutronTracker, What is the Purpose of the UseBeam-memberfunction? I see that the mean energy and the
beta from relativity should be added here, but I would like to understand how exactly these numbers are used by the tracker.

Yours sincerely,
Christiaan Douma.

File Attachments

1) calibr_1000AMeV_999keV_14m.eps, downloaded 200 times