Subject: TrackID changes
Posted by lanyizsombor on Wed, 29 Mar 2017 06:16:05 GMT
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Hi all,

I would have a short question. I would like to track every neutron's way in a simulation to test my own code for neutron cross-talk and for this, I thought that I get the interaction coordinates with stepping through the points using GetTrackID(), but I'm not sure whether it works well. So, the main question is that the TrackID changes only if a neutron stops (energy below threshold) and give it's energy for a proton for example; or it could change otherwise too? Hope I asked the question more or less clear.

Best regards,
Zsombor Lányi

Subject: Re: TrackID changes
Posted by Jan Mayer on Wed, 05 Apr 2017 07:34:35 GMT
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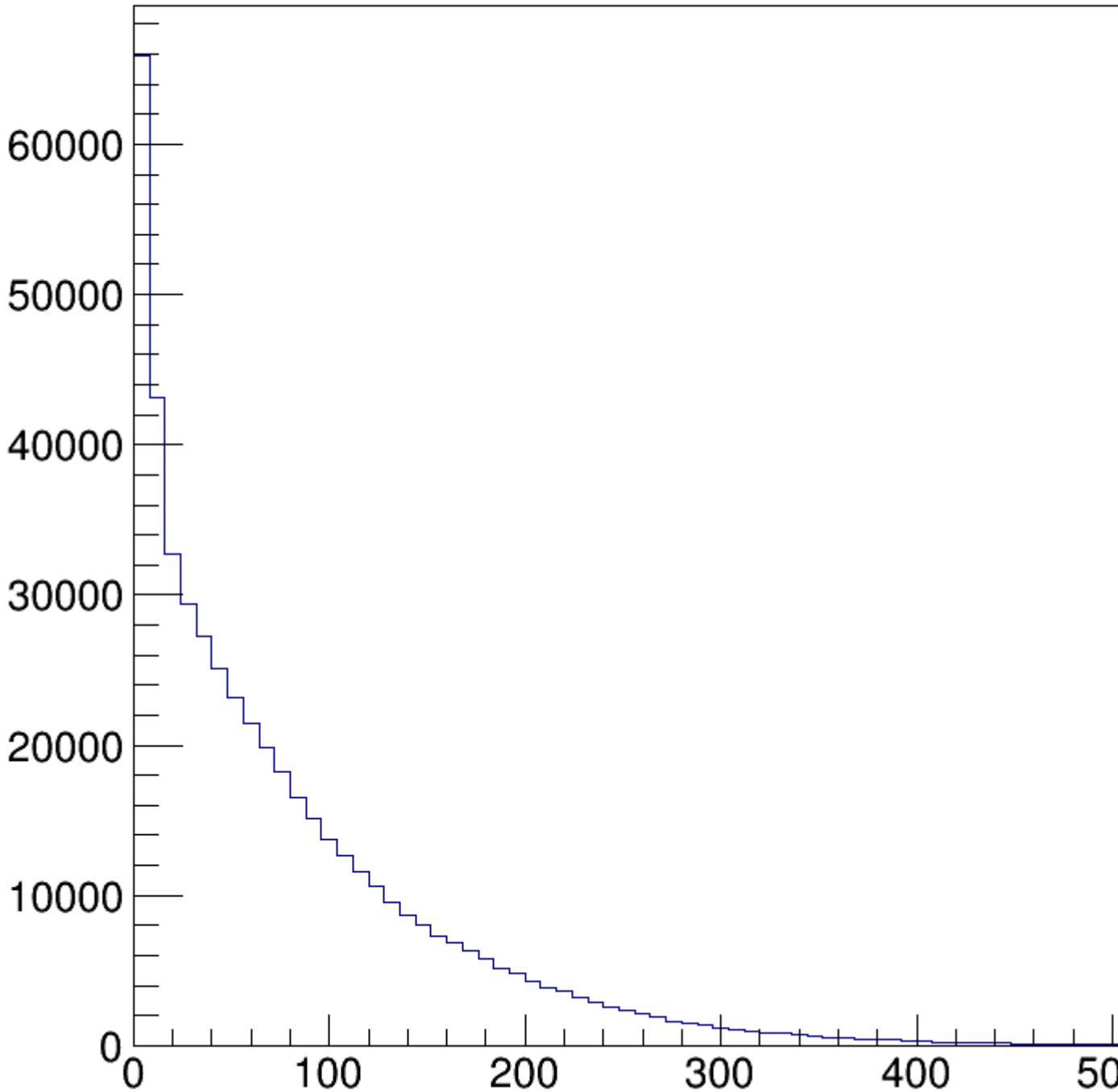
Hi Zsombor,

the TrackIDs can be a bit fiddly, especially while accessing them during the simulation, but should work in principle. The track ID can also "change" on any interaction - that means you technically have a new track. You can have a look at that afterwards by using the MotherID. This is -1 for primary particles, so if you shoot in two Neutron you should have two tracks with motherID -1 and pid 2112 (see http://pdg.lbl.gov/2010/reviews/rpp2010-rev-monte-carlo-numbering.pdf).
run->SetStoreTraj(kTRUE); probably needs to be set for this at well (4th parameter in r3ball.C).

Best,
Jan

File Attachments

1) trackids.png, downloaded 538 times


NeulandPoints.fTra
60000
50000
40000
30000
20000
10000
0
0
100
200
300
400
50