

---

Subject: Re: NeuLAND tracking algorithm

Posted by [Dmytro Kresan](#) on Thu, 17 Mar 2016 09:37:52 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Hi Christiaan,

- 1) Maybe Jan Mayer can comment on this. I wrote `calibr.C` macro, where efficiency is calculated depending on specified impurity level for each event type. I do not know how it is done in `calibr_mini.C`.
- 2)  $\kappa$  is just an artificial parameter, which sets the inclination of linear 2D cuts on number of clusters versus deposited energy. It is set per hand, in order to best described simulated data. Physics behind - anti-correlation between mentioned 2 variables.
- 3) second function in `calibr.C` (with automatic calculation of  $\kappa$ ) has to be revised and fixed. It does not work for me also. Use the function with manual setting of  $\kappa$ .
- 4) The meaning of numbers is: parameter 1 -  $\kappa$  value used. The rest of parameters: energy cuts on each type of event.
- 5) I do not know. We have to ask Jan Mayer. But I do not expect divergences in output results.
- 6) The value of beam velocity is used in the tracker in order to select best candidates for hits from primary neutron(s) interaction. The point is that incident neutrons have velocity very close to the beam.

Hope I could help a bit.

Best regards,  
Dima

---