

Genie User Forum

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UNIVERSAL NEUTRINO GENERATOR
& GLOBAL FIT

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On behalf of the GENIE collaboration



Genie Updates



15 May 2019

GENIE Forum - M. Roda

Resonant interaction for electron scattering

- Updates from electron scattering
 - Given directly from Afro
 - See her slides for details
 - RES event generation is now treated in the same way
 - Proper kinematic limit evaluation for EM scattering
 - no flavour change

Fix in gntpc

- A bug was discovered and fixed in gntpc
 - Error in counting the number of final state particles
 - Some were double counted
 - The fix is already in the master branch
 - Please all those who are

Update in the probe concept


- Highlights from Radiative corrections in electron scattering
 - The model will have impact on the physics of neutrinos as well
 - Radiation corrections for the outgoing charged particles
 - Code is not in yet but it will have important consequences
 - Especially for those who are linking directly against GENIE code
 - We believe this needs to be advertised soon
- The Probe concept is about to change – distinction
 - Experimental probe – probe whose energy is set for the interaction
 - Corrected probe – after radiation corrections
- Distinguished by status in the output and Event Record
- Change in the EventRecord API: Probe() is going to disappear
 - Two new methods will be added
- Timeline: one month to merge into master
 - More until deployment into a tagged version – depending on other developments

Single Kaon – help required

- We had requests about deployment of single Kaon production
 - The model is there and it is functional - if needed
 - Deployment in a tune is not coming soon for essentially two reasons
 - The model is available only for neutrinos
 - There will be need for a dedicated tuning campaign
- We discussed in the collaboration
 - The first (and necessary step) is to add the anti-neutrino process
 - Volunteers are required
 - We believe it should be easy enough given that some part of the machinery is there
 - If anyone is interested, please contact us
- There is also work required for Kaon FSI – both short and long term



Feedback session



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Feedback session

- Any feedback regarding the Forum
 - Time / schedule
 - Structure
 - Things missing in the discussion
- Any other feedback related to communications?
 - GitHub related issues – which is a relatively new procedure
- Others?