BHCal Meeting 2025-10-17

Stefan Bathe

Baruch/CUNY, Heidelberg

Incremental Preliminary Design and Safety Review of the ePIC Hadron and Forward Electromagnetic Calorimetry

- Page-turn was last Friday (Oct 10)
- Got comments on slides, in particular pertaining to simulation results
- Need to be addressed
- Today (Oct 17): Prebrief Due Date (supplemental material = pre-TDR)
- Next Friday (Oct 24): Final Version of Presentations Due
- Next, next Th, Fr, October 30, 31: Review

Page Turn Agenda (subject to minor changes):

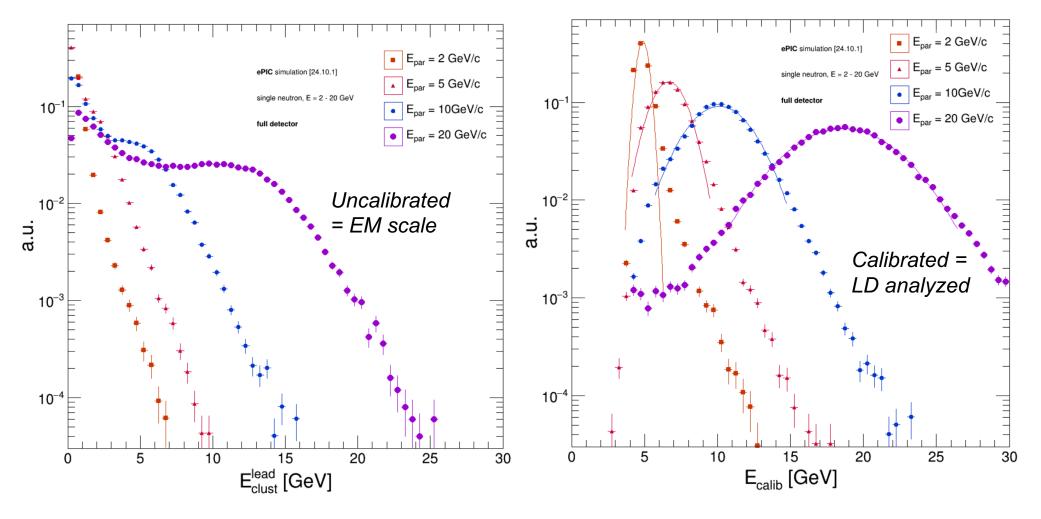
Extended Page Turns: Incremental Preliminary Design and Safety Review of the ePIC Hadron and Forward Electromagnetic Calorimetry (10 October 2025) · Indico Access Key: PDRfECalHCal2025

Neutrons

Issues:

Why does 2 GeV neutron show up at 5 GeV?

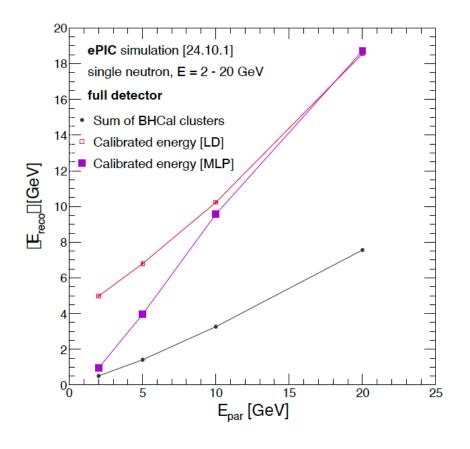
What does this look like with simple Geant-based calibration to hadronic scale?

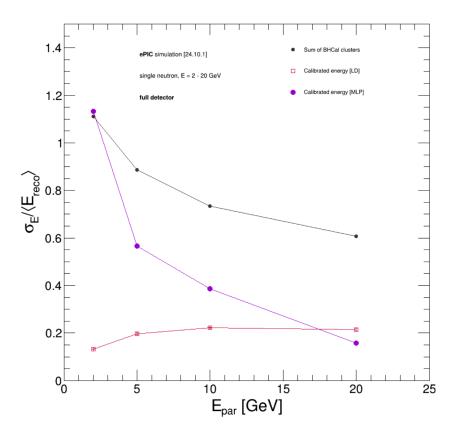


Neutrons

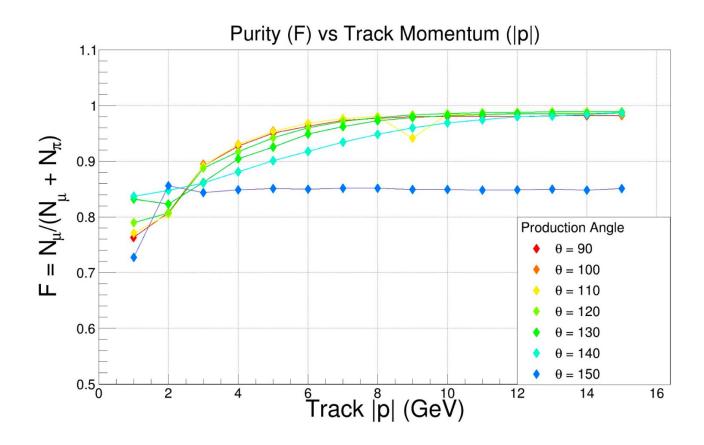
Issues:

While LD gets energy wrong at low E, MLP has much worse resolution What does this look like with simple Geant based calibration to hadronic scale?





Muons



- Purity appears high, but as many muons as pions thrown
- Idea to make use of individual tile readout by checking for MIP-like signal in every tile