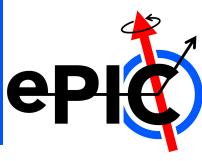


UIUC plans for nHCal Prototypes and Testbeam

Caroline Riedl and Matthias Perdekamp for the UIUC ePIC group February 5, 2025 nHCal DSC meeting

UIUC plans for nHCal prototype R&D - next 12 months



Stepwise R&D

- 1. Goal build group with expertise and tooling for prototype test beam measurements (1 senior, 1 GS, 3 UG, 1 Tech)
- 2. Build single KLM slab (to characterize response to cosmics)
- 3. Develop design of KLM-based nHCAL (to study feasibility of mechanical integration)
- 4. Implement in ePIC simulation (to study performance capabilities)
- 5. Build multi-column prototype (based on KLM-based nHCAL)
- 6. Prepare test beam at CERN or FNAL (mechanical support, trigger detector, readout, slow control, DAQ, data analysis). Allow for integration of other prototypes.

nHCal geometry



