



UIUC plans for nHCal Prototypes and Testbeam

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for the UIUC ePIC group
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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.

