

Roman pots, B0, & Off-Momentum Detector Test Beam Needs (all AC-LGADs)

- Test beams at Fermilab hoped-for in Spring 2024.
 - Plan to test AC-LGAD + EICROCO ASIC to extract performance for both timing and spatial resolution (with charge sharing) using MIP beams.
- Need space to install ~VME-sized board into telescope containing control board with AC-LGAD + ASIC bonded.
- Very important to assess performance of sensor with different geometry (e.g. pitch) and to test response of 4x4 channel EICROCO to collect information for next iteration of the ASIC.
- RHIC (STAR) could be a suitable alternative with MIP pions → need to verify what can be provided in that scenario by STAR.