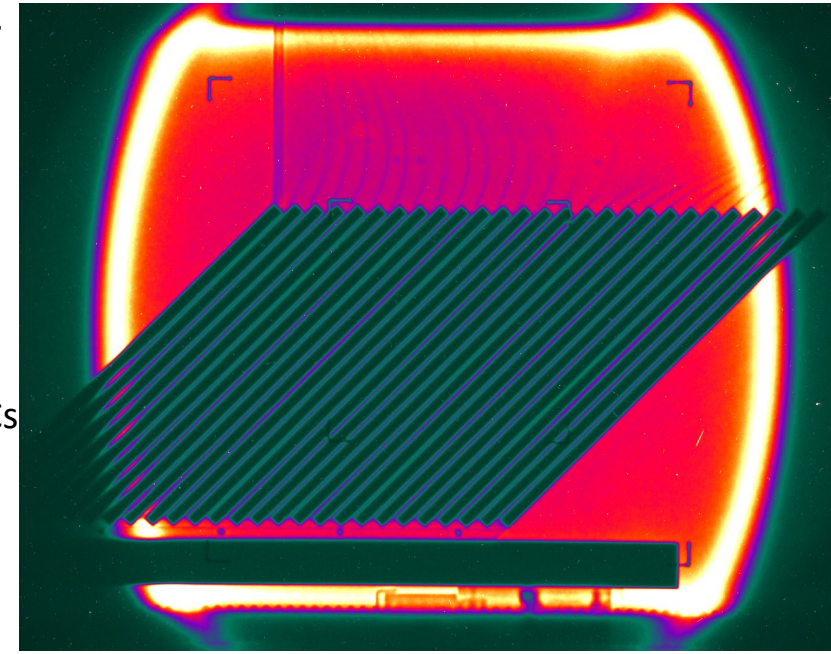
TestBeamAvailableAtBNL102424

Xiaodong Jiang

Test Beam Available at BNL

at the BNL NASA Space Radiation Laboratory (NSRL) beam line

- Beams Available:
  - Protons: up to 2.5 GeV kinetic energy, $2x10^{11}$ protons per spill (a Booster extraction spill: 4.2 sec).
  - Ions ($_4$He to $_{209}$Bi). For example, $_{56}$Fe kinetic energy up to 1.0 GeV/n, $2x10^9$ Fe-ions per spill.
  - Quick changes of beam energy and species, in minutes.
- Beam Shapes:
  - Uniform square beam: 10x10, 20x20, … 60 x 60 cm^2
  - or pencil beam ~1 cm spot size.
- Tools and Supports Available:
  - Remote controlled tables for rotation and positioning
  - Patch panels for HV, signal, ethernet cables.
  - Electronics for a trigger setup, a simple DAQ, ADCs TDCs
- Easy and Fast access to the experimental area.
- Operated 2400 hrs in FY-2024.
  (biology and space electronics tests).



PHENIX Zero-Degree Calorimeter being calibrated with a $_{56}$Fe-beam (1000 MeV/n), beam size: 20x20 cm^2

More details at: https://www.bnl.gov/nsrl/
Please plan ahead and tell us what you need.
Michael Sivertz: sivertz@bnl.gov
Xiaodong Jiang: xjiang3@bnl.gov