

High Rate Tracker: Radiation Hardness Studies

- Primary concern – high flux of electrons
- Secondaries from SR/SR scattering
- Radiation hardness tests for
 - Timepix4 ASIC
 - Carrier board including bonds/connections
 - Determine the shielding requirements for the readout electronics
- Preliminary Timeline
 - ASIC tests during 2024
 - Board tests on prototype module 2025
- Provisionally using Bonn Cyclotron for irradiation
- Electron beam tests at Hall-D beamdump & Mainz/Bonn.