

Session summary: High-resolution γ -ray spectroscopy

Peak participation: 80

Session: Thursday August 10, 2020 3:30 - 4:30 PM (EST)

Session: (Co-chairs: Alex Gade and Mark Riley)

1. GRETINA (Dirk Weisshaar) 8 + 2 mins
2. GRETA (Paul Fallon) 8 + 2
3. Gammasphere (Mike Carpenter) 8 + 2
4. Clovershare (Ben Crider) 8 + 2
5. CLARION2 (Mitch Allmond) 8 + 2
6. Discussion and AOB 10

GRETINA and GRETA

- GRETINA ending 3rd science campaign at NSCL (14 experiments), will be taken down starting 08/17 and readied for shipping to ANL. GRETINA has been operating with 12 Quads at NSCL, which corresponds to complete GRETINA
- GRETA finished successful CD-2/3 review (ready to build - congratulations!), GRETA will consist of 30 Quads, early finish CD-4A is planned for around 08/2023 for FRIB science in 2024. Until then, GRETINA is available for early FRIB science and ANL campaigns.

Gammasphere status

- Gammasphere program at FMA is presently ongoing, before the array ran at AGFA (until Feb 2020), shutdown following March 2020 COVID shelter-in-place order, Gammasphere experiments restarted in July again, running 5 experiments with neutron-shell and microball.
Moves back to AGFA in Nov 2020
- Status: Have been running for 20 years, dedicated technician helps with repairs, 85 working detectors are anticipated by the end of the year, new pre-amp design being finalized, VXI cards are about to be eliminated
- Project: use LaBr_3 detectors in open holes of Gammasphere frame

CloverShare and CLARION2

- CloverShare is a community pool of clovers that travels to Laboratories for experimental campaigns; beta decay campaign at NSCL ended in spring 2020 pre-COVID (4 experiments), next gig is for broad set of NRF measurements at H γ S – CloverShare will be part of early FRIB Decay Station
- CLARION2 – Campaigns at ANU, RIKEN as part of BRIKEN, and FSU done; CLARION1 will be part of early FRIB Decay Station; has a new frame to be shipped to FSU for science (2021) and for campaigns at CARIBU/ANL (2022 or later) and ReA and stopped beam experiments at FRIB (2023 or later)