Contribution ID: 29 Type: Poster

FRIB LLRF System

The design for the FRIB (Facility for Rare Isotope Beams) LLRF controllers is nearing completion. The LLRF controller features direct, non-IQ sampling of its RF inputs and ADRC (active disturbance rejection control) for mitigating the effects of microphonics in a noisy environment. The controller also contains internal driver circuits for controlling piezo actuators, stepper motors, and pneumatic tuners. Details of the hardware design and control test results will be presented.

Primary author: USHER, Nathan (FRIB / NSCL)

Co-author: Dr ZHAO, Shen (Facility for Rare Isotope Beams / National Superconducting Cyclotron Labora-

tory)

Presenters: USHER, Nathan (FRIB / NSCL); Dr ZHAO, Shen (Facility for Rare Isotope Beams / National Super-

conducting Cyclotron Laboratory)