

## **New Applications of the RHIC LLRF Platform (2): The BNL R & D Energy Recovery Linac LLRF System**

Since late 2011, efforts have been underway to commission the major RF systems of the BNL R & D ERL. These are a 5-cell SRF linac cavity and a half cell SRF photo cathode RF gun, both at 703 MHz (RHIC  $h=9000$ ). The LLRF system also supplies the 703MHz reference for the SRF gun drive laser operating at a rep rate of 9.4MHz (RHIC  $h=120$ ). The R & D ERL systems are the first application of the RHIC LLRF Platform to control of SRF systems. This paper will discuss the LLRF system architecture, commissioning challenges and results to date.

**Primary author:** SMITH, Kevin (BNL)

**Co-authors:** SEVERINO, Freddy (BNL); NARAYAN, Geetha (BNL)

**Presenter:** SMITH, Kevin (BNL)