

Testing of the SSR2 SRF cavity tuner for PIP-II at 2 K

Monday 26 August 2024 16:00 (2 hours)

The PIP-II linac will include thirty-five 325 MHz Single Spoke Resonators Type 2 (SSR2) cavities. Each cavity will be equipped with a tuner for resonance control. The tuner consists of mechanical frame with a motor for coarse frequency tuning and a piezoelectric actuator for fine frequency tuning. The tuner was tested for the first time at Fermilab on an SSR2 cavity. This dressed cavity-tuner system was tested at the single spoke testing cryo-stat (STC) in Fermilab at 2 K. The tuner performance was evaluated and is presented. Lastly, cavity-tuner mechanical modes were measured via the piezos.

Footnotes

Funding Agency

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