

Implementation of LLRF System for RFT-30 Cyclotron

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An RFT-30 cyclotron is a 30 MeV proton accelerator for radioisotope (RI) production and fundamental research. A Low Level RF (LLRF) system is used for the stable control of the cyclotron RF system. In this work, we have implemented automatic LLRF control program for the RFT-30 cyclotron. The LLRF program captures the monitor signals from the RF system and then decides the optimal parameters for the RF system control. When the AUTOTUNE mode is configured, the LLRF program automatically controls the RF system based on the parameters. The proposed LLRF system can enhance the stability of the RF system and then provides the human operators with easy operation for the RFT-30 cyclotron.

Paper submission Plan

Best Presentation

Contribution track

ICABU WG1. Accelerator Systems

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