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A new EPICS based frequency synthesizer and power control system for the H⁻ RF Ion Source at ISIS

Thursday 5 June 2025 15:30 (2 hours)

A Low-Level RF and Power Control system based on EPICS has been developed for the new H⁻ RF Ion Source on the Pre-Injector Test Stand at ISIS Spallation Neutron and Muon source, UKRI-STFC Rutherford Appleton Laboratory. The Ion Source LLRF system provides a 2 MHz signal to a Solid-State 100 kW RF Amplifier that drives the Ion Source Plasma, the changing Plasma load requires fast Frequency agility and closed loop Power Control. This paper will detail the design and performance of the LLRF system.

Footnotes

Paper preparation format

LaTeX

Region represented

Europe

Funding Agency

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