HB2025 - the 71st ICFA Advanced Beam Dynamics workshop on High-Intensity and High-Brightness Hadron Beams



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RF system issues to drive the Newgain RFQ without circulators

Tuesday, October 21, 2025 4:00 PM (30 minutes)

A second 4-port RFQ (RFQ2) is being built at GANIL in the framework of the NEWGAIN project, the new injector for the SPIRAL2 SC linac, dedicated to heavier ions. The experience driving RFQ1, the technology evolution on solid state amplifier and the commissioning planning of the new injector let us try to drive the RFQ2 with a simplified RF system based on one LLRF, solid state amplifiers, and no circulators. The paper develops these topics, focusing mainly on the RFQ used as a combiner and on the amplifier issues: oversizing, transistor working point, combiner choice

Footnotes

Funding Agency

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I have read and accept the Privacy Policy Statement

Yes

Author: DI GIACOMO, Marco (GANIL)

Presenter: DI GIACOMO, Marco (GANIL)

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