

Tests at 2K of the beta 0.35 Spoke Cryomodule prototype with the MTCA.4-based Low Level RF System prototype for the MYRRHA R&D

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Within the framework of the first phase of MYRRHA (Multi-purpose hYbrid Research Reactor for High-tech Applications) project, as known as MINERVA, IJCLab was assigned with the development of a fully functional Spoke cryomodule prototype development, which was tested at 2K. This prototype integrates two superconducting single spoke cavities, the RF power couplers and the Cold Tuning Systems associated. On the control side, a MTCA.4-based Low Level Radio Frequency (LLRF) system prototype and the Software/EPICS developments have been realized by IJCLab and the SCK•CEN in partnership with the company IOxOS Technologies. The final version of the global system and the results of the tests at 2K are presented, along with future projections.

Keyword

SRF, MTCA, LLRF, EPICS, MYRRHA

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