

## ELECTROMAGNETIC PROPERTIES CHARACTERIZATION AND Q-FACTOR MEASUREMENTS OF NIOBIUM PROTOTYPES OF 325 MHZ COAXIAL HALF-WAVE RESONATOR

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The results of experimental measurements of the electromagnetic properties of a niobium prototype of coaxial half-wave resonators (HWR) [1] operating at a frequency of 325 MHz for the Nuclotron-based Ion Collider fAcility (NICA) injector are presented and discussed.

The experiments were carried out in a test cryomodule [2] at room temperature and liquid nitrogen temperature. Various methods for measuring the Q-factor of the niobium prototype are compared and analyzed.

The presented results will be used for further development and fabrication of superconducting niobium resonators of a similar design for the NICA project.

### REFERENCES

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