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R&D on SRF cavities at INFN-LASA

Wednesday 4 June 2025 16:00 (2 hours)

As part of its ongoing and future contributions to high-Q/high-G activities in major international projects such as PIP-II, ILC Technology Network, and the European Strategy for Particle Physics, INFN-LASA is upgrading its experimental facility for vertical cold tests of superconducting cavities. This upgrade will enable cavity performance characterization in a low residual magnetic field environment and with dedicated diagnostics for understanding possible performance limitation. In parallel, state-of-the-art surface treatments aimed at achieving high-Q and high-G performance are being developed and applied to single and multicell cavities at different frequencies. This paper presents the current status of the facility, its key features, an overview of cavities currently in production, and the experimental results obtained to date.

Footnotes

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