

Ultrafast Ferroelectric Based Tuning for Microphonics Suppression in SRF Cavities

Thursday, November 14, 2024 9:20 AM (30 minutes)

A tuner based on Low loss ferroelectric material exhibits extraordinary performance in the application of suppressing microphonics in SRF cavities. For many applications, this could reduce significantly RF power consumption of accelerators. With this presentation, we will demonstrate Euclid's fast ferroelectric tuning technology in RF power configurations that combine the RF power source (klystron) and the fast active tuner at the same cavity port. We considered a magic-T configuration that will allow its use with a single RF port connected to the cavity. We will report progress on this research topic.

Paper submission Plan

No

Best Presentation

No

Contribution track

ICABU WG1. Accelerator Systems

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