FCC Week 2023



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SWELL progress and status

Thursday 8 June 2023 10:48 (18 minutes)

The Slotted Waveguide ELLiptical (SWELL) cavity is a novel concept of superconducting cavity proposed as an alternative option for the FCCee RF system. The presentation will give an update on the fabrication of the 1.3 GHz SWELL prototype used as a first step of the feasibility demonstration. The mechanical design, the precise machining results and the blank assembly tests of the cavity quadrants in clean room will be presented. Accurate RF measurements (resonant frequency and Q0 factor) of the cavity at room temperature will be also be reported, together with the plans for future steps towards the surface preparation and the test at cold temperature.

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Track Classification: SRF Programme