13th MT ARD ST3 Meeting 2025 bei DESY in Zeuthen



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Type: Talk

First beam commissioning of the SRF photoelectron gun at HZB

Friday 27 June 2025 09:20 (20 minutes)

The versatile 1.3 GHz superconducting radio-frequency (SRF) gun at HZB succesfully generated first photoemission beam from a high quantum efficiency (QE) multi-alkali photocathode. This demonstrates worldwide first beam operation of a SRF gun at high repetition rate and with a robust multi-alkali Na-based photoemissionn source. The setup of the test and all sub-systems is described. The latest results of SRF commissioning, cavity performance, photocathode QE measurements and beam parameter exploration campaigns is presented in the talk.

Summary

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Session Classification: Beam Dynamics

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