ICAP'24   GSI   TECHNISCHE UNIVERSITÄT DARMSTADT

Contribution ID: **27**   Type: **Invited talk**

Benchmark of Linac Model and Phase Space Measurements at the SNS Beam Test Facility

Thursday, 3 October 2024 14:00 (30 minutes)

The SNS Beam Test Facility is equipped with advanced phase space diagnostics that enable very detailed characterization of beam distributions at the beginning and end of a test beamline. I show the latest results in benchmarking with PyORBIT after a significant reconfiguration of the beamline. I will discuss on-going efforts to improve the simulation accuracy, with implications for modeling of beam halo relevant to prediction of scraping losses in an operational linac. I will also discuss model requirements for the benchmark simulation.

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Session Classification: Sessions in Living Room 1+2

Track Classification: A-2 Modeling of Current and Future Machines