



Contribution ID: 2298 Contribution code: SUPG019

Type: Student Poster Presentation

Measurement and modeling of beam transport in the FODO line of the Spallation Neutron Source Beam Test Facility

Sunday, 19 May 2024 14:00 (4 hours)

Ongoing studies at the Spallation Neutron Source (SNS) Beam Test Facility (BTF) seek to understand and model bunch dynamics in a high-power LINAC front-end. The BTF has recently been upgraded with a reconfiguration from a U-shaped line to a Straight line. We report the current state of model benchmarking, with a focus on RMS beam sizes within the FODO line. The beam measurement is obtained via three camera/screen pairs in the FODO line. This presentation discusses the methodology and results of this measurement.

Footnotes

This material is based upon work supported by the U.S. Department of Energy, Office of Science, Office of High Energy Physics. This manuscript has been authored by UT- Battelle, LLC under Contract No. DE-AC05-00OR22725 with the U.S. Department of Energy.

Funding Agency

Oak Ridge National Laboratory

Paper preparation format

LaTeX

Region represented

North America

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Session Classification: Student Poster Session

Track Classification: MC5: Beam Dynamics and EM Fields: MC5.D08 High Intensity in Linear Accelerators Space Charge, Halos