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

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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

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