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Commissioning of the low energy electron gun test stand at the University of Chicago

Thursday, 11 May 2023 16:30 (2 hours)

We built a test stand for evaluating the performance of the thermionic electron sources for the electron lens project at the Integrable Optics Test Accelerator (IOTA) in Fermilab. The lens will be used to study nonlinear dynamics and electron cooling of 2.5 MeV protons with strong space charge. The test stand will validate the characteristics of the thermionic sources and the main parameters of the generated beams. In this paper we present the results of the commissioning of the UChicago test stand and validation of the hollow beam source.

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Footnotes

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Yes

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