

Abstract Submitted
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High Luminosity Lead-208 Targets for the PREX-2 experiment

CAMERON CLARKE, State Univ of NY - Stony Brook, PREX COLLABORATION COLLABORATION — The Lead Radius Experiment (PREX-2) successfully ran in Jefferson Labs Hall A in the Summer of 2019. In order to achieve low angle and high rate for the high precision parity violating electron scattering measurement it is necessary to design and implement a target and collimation system which is capable of high luminosity, isotopically pure, thermally and structurally stable, and sufficiently radiation shielded. The experimental collaboration built upon the experience of the previous design of a lead-diamond sandwich enclosed in a copper jacket with active cooling. We will report on the improved design and implementation of these targets, and summarize their performance during the PREX-2 run.

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