

Abstract Submitted
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Performance of the PREX-II Apparatus¹ CIPRIAN GAL, Stony Brook University, PREX-II AND CREX COLLABORATION — The PREX-II and CREX experiments at the Thomas Jefferson National Accelerator Facility will measure the neutral weak form factors for ^{208}Pb and ^{48}Ca respectively at one judiciously chosen Q^2 value each that enhance the sensitivities to their respective neutron RMS radii. The results of these experiments will constrain the density dependence of the symmetry energy of neutron-rich matter, with implications for three-neutron forces and the properties of neutron stars. The experimental designs require dense isotopically pure targets capable of withstanding high luminosity, radiation hard detectors, precision electronics and diagnostic tracking detectors to calibrate the acceptance and absolute momentum scale and precision polarimetry. We will report on the performance of various subsystems and the projected sensitivity of the data collected to date.

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Krishna Kumar
University of Massachusetts Amherst

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