

Abstract Submitted
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The NOPTREX Experiment¹ CHRISTOPHER CRAWFORD, University of Kentucky, NOPTREX COLLABORATION — The Neutron Optics Parity and Time Reversal EXperiment (NOPTREX) aims to search for possible parity and time reversal invariance violation in the $\sigma_n \cdot k_n \times I$ dependence of the low-energy neutron-nucleon forward scattering amplitude. Certain nuclei such as ^{139}La have been shown to exhibit amplification of up to 10^6 , providing experimental sensitivity at the level of the next generation of searches for the electric dipole moment of the neutron. I will report on world-wide measurements of parity violating amplitudes and the so-called κ factor of various target nuclei, which determine the experimental sensitivity, and also on the development of neutron polarizers, polarized targets, and detectors for this experiment.

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