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Measurements of Parity Violation in Electron Scattering

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The measurement of the violation of parity symmetry in electron scattering has proven to be a powerful technique for exploring nuclear matter and for the search for new fundamental forces. A successful history with the experimental technique has set the stage for a series of high precision measurements to be made over the next decade. Scattering from heavy, spinless targets will measure the neutron skin of heavy nuclei, providing a valuable calibration for the equation-of-state in neutron-rich nuclear systems. Searches for new neutral-current interactions will be performed in ultra-high precision measurements of scattering from protons and electrons at very low momentum transfer Q^2 . In the DIS regime, scattering from deuterium will extend this search for new physics while also providing a unique window on nucleon partonic structure. The physics implications of recent results and development of the next generation of experiments will be reviewed.