CREX Experiment Progress by Rakitha Beminiwattha on behalf of the CREX Collaboration.

CREX experiment has recently completed the high precision measurement of the parity-violating (PV) asymmetry of ⁴⁸Ca elastic electron scattering. The CREX experiment at Jefferson Lab measured the electroweak PV asymmetry to access neutron distributions of neutron-rich ⁴⁸Ca nucleus and obtain the RMS neutron radius of ⁴⁸Ca. Such precise measurement will have a significant impact on nuclear theory, providing unique experimental input to help bridge ab-initio theoretical approaches used for light nuclei (including 3-neutron forces) and density functional theories appropriate for heavy nuclei. This talk will highlight the recent progress made by CREX collaboration in required data analysis to achieve this precise measurement.