

Abstracts APS

Siyu Jian, Nilanga Liyanage
University of Virginia

(on behalf of Jefferson Lab PREX collaboration)

January 8, 2021

Abstract

The PRex-II and CRex experiment measures the model independent RMS radius of the neutron skin thickness with parity-violating asymmetry elastic scattering on ^{208}Pb and ^{48}Ca target respectively. The neutron skin thickness is a fundamental parameter which have broad impact on neutron star structure, heavy iron collision and atomic parity violation experiment. The CRex experiment was performed in Jefferson Lab Hall A with the High resolution Spectrometer(HRS). In this report I will discuss the Optics Calibration of the High Resolution Spectrometer.