XVIth Quark Confinement and the Hadron Spectrum



Contribution ID: 207

Type: Oral

Neutral weak form factors and nuclear equation of state

Tuesday 20 August 2024 16:00 (20 minutes)

The nuclear equation of state (EOS) describes varied phenomena, from the distribution of neutrons and protons inside heavy nuclei to the maximum size of neutron stars. The PREX-2 and CREX experiments used parity violating electron scattering to determine the neutral weak form factors for two doubly magic nuclei: 208Pb and 48Ca. These results can be used to cleanly extract a neutron radius and put constraints on parameters in the nuclear EOS. This talk will review the experiments and extraction of neutron skins. Considerations regarding the broader implications and comparisons to other neutron star experimental results will also be provided.

Primary author:GAL, CiprianPresenter:GAL, CiprianSession Classification:Nuclear and Astro-particle Physics

Track Classification: F: Nuclear and Astro-Particle Physics