XVIth Quark Confinement and the Hadron Spectrum



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Neutral weak form factors and nuclear equation of state

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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.

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