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CREX: The Calcium weak Radius Experiment

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The ^{48}Ca nucleus provides an important testing ground for models (both density functional and ab-initio) trying to describe the arrangement of both protons and neutrons in nuclei. The parity violating electron scattering asymmetry from the unpolarized ^{48}Ca nucleus gives direct access to its weak form factor. Using data collected with the CEBAF accelerator at Jefferson Lab in 2020 the CREX collaboration has completed a blinded analysis of this quantity. This talk will describe the experiment, data analysis and systematic control, as well as the implications of this result on our understanding of nuclear matter.

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