

## The New Proton Charge Radius Experiment at JLab

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Recent measurements of the proton charge radius in muonic hydrogen, have found a large ( $> 7 \sigma$ ) discrepancy compared to the charge radius extracted from regular hydrogen, using either atomic spectroscopy or electron scattering. We are preparing a new high precision measurement of the proton charge radius using electron scattering (PRad) at JLab. This experiment will be the first magnetic spectrometer free measurement of the proton charge radius, using a novel windowless gas flow target and a high resolution calorimeter (HyCal). The systematic uncertainties will be controlled by detecting the elastic and the Möller scattered electrons simultaneously within the same geometric acceptance. The experiment will cover a  $Q^2$  range of  $10^{-4} - 10^{-2} \text{ GeV}^2$ , reaching the lowest  $Q^2$  of any previous electron-proton scattering experiment.

The experiment is currently on the floor in Hall B, scheduled to run from mid May until the end of June. We will discuss the status of this experiment and the preliminary analysis. This work is supported by the U.S. Department of Energy under contract number DE-FG02-07ER41528 and by the National Science Foundation under contract number PHY-1229153.