

Abstract Submitted
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Qweak Main Detector Status DAVID MACK, TJNAF, QWEAK COLLABORATION — The Qweak experiment at Jefferson Laboratory will make the first measurement of the weak charge of the proton. Because this electroweak observable is suppressed in the Standard Model, even the modest projected 4% uncertainty will allow us to constrain new electron-quark interactions at the multi TeV-scale. The weak charge is accessed through the small (< 1 ppm), parity-violating asymmetry in the elastic scattering of longitudinally polarized electrons from unpolarized protons. Scattered electrons which pass through fused silica bars emit Cerenkov light which is collected and converted to current by phototubes. Most large procurements and R&D are complete. The status of the construction effort will be summarized. We remain on-track for installation in Spring 2009.

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