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A Status Report of the  $Q_{weak}$  Experiment at Jefferson Lab KATHERINE MYERS, The George Washington University, QWEAK COLLABO-RATION — The  $Q_{weak}$  Collaboration at Jefferson Lab will perform the first direct measurement of the proton's weak charge,  $Q_W^p$ , to a precision of 4% by measuring the parity-violating asymmetry in elastic electron-proton scattering. This asymmetry is expected to be small, ~ 250 ppb and is proportional to the proton's weak charge. At tree level, the weak mixing angle is related to the weak charge of the proton by  $Q_W^p = 1-4\sin^2 \theta_W$ , leading to a 0.3% measurement of  $\sin^2 \theta_W$  at low energy - making this the best low energy measurement to date. This measurement will test the Standard Model prediction for the running of the weak mixing angle and be sensitive to new parity-violating physics at the TeV scale. The experiment was recently installed and commissioned in Hall C. The status of the experiment and commissioning will be discussed in this talk. Preliminary results may be presented.

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