## Abstract Submitted for the APR05 Meeting of The American Physical Society

SLAC Experiment E158: A Precision Measurement of the Weak Mixing Angle by Moller Scattering MICHAEL GARY, UC Berkeley, SLAC E158 COLLABORATION — SLAC Experiment E158 is a precision measurement of the weak mixing angle at low  $Q^2$ . The experiment is a mesurement of the left-right asymmetry  $(A_{LR})$  in Møller scattering  $(e^-e^- \rightarrow e^-e^-)$  of polarized electrons off unpolarized electrons in a liquid Hydrogen target. E158 tests electroweak theory at the quantum loop level and is sensitive to new physics at the TeV scale. The experiment has recently been completed and results are now being released.

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