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Measurements and combination of the weak mixing angle at the Tevatron and extraction of the W mass

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We combine four measurements of the forward-backward charge asymmetry A_{FB} in $p\bar{p} \to Z/\gamma^* \to e^+e^-/\mu^+\mu^- + X$ events using ~ 10 fb^{-1} of $p\bar{p}$ data collected at $\sqrt{s} = 1.96$ TeV by the CDF and D0 detectors at the Fermilab Tevatron collider. A_{FB} is measured as a function of the invariant mass of the dilepton system to extract the effective weak mixing angle $\sin^2\theta^{lep}_{eff}$. We discuss the combination of these measurements and present the indirect extraction of the W mass in the context of the standard model.

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