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TITLE: **Combination of the CDF and D0 effective leptonic electroweak mixing angles and indirect measurement of the W mass.**

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PLACE: 500-1-001 - Main Auditorium

## ABSTRACT

CDF and D0 have measured the effective leptonic weak mixing angle  $\sin^2\theta_{\text{lept}}^{\text{eff}}$ , using their full Tevatron datasets. I describe the techniques used in CDF and D0 analyses and the Tevatron combination of these two measurements. I also discuss the Zfitter standard model-based inference of the on-shell electroweak mixing angle  $\sin^2\theta_W(\text{on-shell})$ , or equivalently, an indirect measurement of the W-boson mass. The combination of CDF and D0 results yields:  $\sin^2\theta_{\text{lept}}^{\text{eff}} = 0.23179 \pm 0.00035$ ,  
 $\sin^2\theta_W(\text{on shell}) = 0.22356 \pm 0.00035$   
 $M_W(\text{indirect}) = 80.351 \pm 0.018 \text{ GeV}/c^2$ .