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First measurement of $\sigma(p\bar{p}) \cdot Br(Z \to \tau^+$ YURI GERSHTEIN, Florida State University, DZERO COLLABORATION — We present the first measurement of the cross-section for Z production in its decay mode to tau leptons in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV with DØ detector. With the sample corresponding to an integrated luminosity of 226 pb^{-1} we obtain $\sigma \cdot Br(Z \to \tau^+\tau^-) = 237 \pm 15(stat) \pm 18(sys) \pm 15(lum)$ pb, in agreement with the standard model prediction. Gained understanding of the $\tau^+\tau^-$ final state at hadronic collider opens up new possibilities for searches for new physics phenomena.

Sharon Hagopian
Florida State University

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