

Abstract Submitted
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Measurement of the Transverse Momentum Distribution for Z Boson Production at the Tevatron W. DAVID DAGENHART, Brandeis University, CDF COLLABORATION — We present a measurement of the transverse momentum distribution for $\sigma(p\bar{p} \rightarrow Z/\gamma^*) \cdot Br(Z/\gamma^* \rightarrow \mu\mu)$ in the $66 \text{ GeV}/c^2$ to $116 \text{ GeV}/c^2$ Z/γ^* mass range using CDF Run II data corresponding to an integrated luminosity of 337 pb^{-1} . In the low p_T region this distribution is determined by soft gluon radiation and experimental measurements constrain models of this process. These constraints reduce the systematic uncertainty associated with the W boson p_T spectrum in Tevatron measurements of the W boson mass.

Eric James
Fermi National Accelerator Lab

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