

Abstract Submitted
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Direct search for Z' in the di-electron channel in $p\bar{p}$ collisions at 1.96 TeV using the D0 detector at Fermilab IOANNIS KATSANOS, Columbia University, D0 COLLABORATION — The existence of a heavy partner of the Z boson, a so-called Z' boson, is proposed in many extensions of the Standard Model, including grand unified theories, extended technicolor models, and models with extra dimensions. We report on a direct search in the di-electron invariant mass spectrum for evidence of Z' production, using data taken with the D0 detector at the Fermilab Tevatron $p\bar{p}$ collider at a center-of-mass energy of $\sqrt{s} = 1.96$ TeV. We will present preliminary results using data collected during RunIIa with integrated luminosity of 1 fb^{-1} .

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