

Abstract Submitted
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Search for trilepton SUSY signal at CDF MARCELO VOGEL, JOHN STROLOGAS, MICHAEL GOLD, University of New Mexico, CDF COLLABORATION — The production of chargino-neutralino and their subsequent leptonic decay is one of the most promising supersymmetry (SUSY) signatures at the Tevatron collider. We present a complete CDF search for trileptons and missing transverse energy associated with this process. To increase our sensitivity to SUSY signals (or any other new phenomena) we include low-pt electrons and muons ($p_T > 5$ GeV/c), low dilepton masses ($M_{ll} > 10$ GeV/c²), forward leptons ($|\eta| > 1$), loose leptons (isolated tracks that do not pass ordinary lepton selection) and tau-jets from hadronic tau decays. Special care is taken for the light-flavor and heavy-flavor QCD background that is significant in some of the kinematic regions we explore.

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