Abstract Submitted for the APR05 Meeting of The American Physical Society

Search for R-parity violating supersymmetry in multilepton events with the DØ detector DANIELA KAEFER, RWTH Aachen, DZERO COLLABORATION — Supersymmetric models which do not assume the conservation of R-parity involve additional lepton or baryon number violating trilinear couplings. In this analysis, mass limits on neutralinos and charginos are given for the cases of lepton number violating couplings λ_{122} and λ_{121} which connect leptons of the first and second generations, i.e. electrons and muons as well as their corresponding neutrinos. The data sample, recorded from April 2002 until September 2004 with the DØ experiment at the Fermilab Tevatron collider, corresponds to an integrated luminosity of ~ 350 pb⁻¹. The search concentrates on final states with at least three charged leptons, electrons or muons. In addition, results are reported from a similar search for final states with two electrons and a τ -lepton, relevant for a λ_{133} coupling.

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Date submitted: 10 Jan 2005

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