Abstract Submitted for the APR11 Meeting of The American Physical Society

A Search for Pairs of Charged Massive Long-Lived Particles at the Fermilab Tevatron SUNG WOONG CHO, Korea University, D0 COLLAB-ORATION — We report on an updated search for pairs of Charged Massive Long-Lived Particles (CMLLPs) by the D0 Experiment at the Fermilab Tevatron Collider. CMLLPs are predicted in many theories beyond the Standard Model. The search is based on the signature of two particles reconstructed as muons but with speed and ionization energy loss(dE/dx) of the two particles inconsistent with muons produced in beam-beam collisions. This analysis updates a previous D0 analysis with a larger data sample and improved analysis methods. We present limits for a variety of possible CMLLP models.

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Date submitted: 07 Jan 2011 Electronic form version 1.4