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Search for Lepton Flavor Violation in Upsilon Decays BILL LOVE, University of Pittsburgh, CLEO COLLABORATION — With the data collected with the CLEO III detector at CESR we report the first search for Lepton Flavor Violation in the decays of $\Upsilon(1S)$, $\Upsilon(2S)$, and $\Upsilon(3S)$ resonances. We present the analysis technique, Monte Carlo simulation studies, the background calibration method based on data, and preliminary results of our analysis. If discovered, LFV in Υ decays could be explained by low-mass quantum gravity, Abdus-Salam leptoquarks or neutrino oscillations arising in SUSY models.

David Asner University of Pittsburgh

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