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Search for Lepton Flavor Violation in Υ Decays WILLIAM LOVE, Pittsburgh, CLEO COLLABORATION — Using the data collected with the CLEO III detector at CESR we report on the first search for Lepton Flavor Violation in the decays of the $\Upsilon(1S)$, $\Upsilon(2S)$, and $\Upsilon(3S)$ resonances. After describing the various components of our unbinned maximum-likelihood fit, we present fits to background data, signal Monte Carlo, and signal data. The discovery of LFV in Υ decays could be explained by low-mass quantum gravity, Abdus-Salam leptoquarks, or neutrino oscillations arising in SUSY models.

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