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## **Search for charged lepton flavor violation in J/psi decays at BESIII**

*Friday 8 December 2023 14:50 (20 minutes)*

In the Standard Model (SM), charged Lepton Flavor Violation (cLFV) is highly suppressed to a negligible level by the finite but tiny neutrino masses. The BESIII experiment is a symmetric  $e^+e^-$  collider operating at c.m. energy from 2.0 to 4.95 GeV and has collected the world's largest data set of J/psi (10 Billion),  $\psi(2S)$  (2.7 Billion) on production threshold, and about  $25 \text{ fb}^{-1}$  scan data from 3.77 to 4.95 GeV. This talk presents the cLFV searches at BESIII. The  $J/\psi \rightarrow e \tau / e \mu$  is searched for with 10 Billion J/psi events and the result improves the previously published limit by two orders of magnitude.

### **Name of collaboration or list of co-authors**

BESIII

**Primary author:** YU, Xudong (Peking University)

**Presenter:** YU, Xudong (Peking University)

**Session Classification:** Friday after lunch