

Charged LFV in a low-scale seesaw mSUGRA model

Monday 15 April 2013 15:36 (22 minutes)

Charged lepton flavour violation (LFV) is studied in the low-scale seesaw models of minimal supergravity and with large Yukawa couplings realized through approximate lepton number symmetries. The models have two sources of LFV, one originating from the soft supersymmetry-breaking sector, and the other entirely supersymmetric one originating from the supersymmetric Yukawa sector. These sources of LFV are carefully studied on dominant LFV processes. Opposed to the dominance of the photon-penguin contributions in the high-scale seesaw supersymmetric models of minimal supergravity, we found that supersymmetry breaking Z-boson-penguin and heavy neutrino box contributions dominate the three-body decay LFV amplitudes.

Author: Prof. ILAKOVAC, Amon (Faculty of Science, University of Zagreb)

Co-authors: Prof. PILAFTSIS, Apostolos (School of Physics and Astronomy, University of Manchester); Mr POPOV, Luka (Faculty of Science, University of Zagreb)

Presenter: Prof. ILAKOVAC, Amon (Faculty of Science, University of Zagreb)

Session Classification: Beyond the Standard Model I