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Muon g-2 and lepton flavor violation in SUSY-GUT theories.

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We found SUSY contribution to the muon g-2 can be compatible with its observed value. In models where Supersymmetry is broken though Supergravity this can be achieved if the soft masses are generated by TeV gaugino masses and light gravitinos. These scenarios provide a natural explanation for not observing lepton flavor violation (LFV) on charged leptons , even if the soft scalar masses are flavor dependent at the GUT scale. In this work we study SUSY models with SU(4)_cxSU(2)_LXSU(2)_R unification extended with an additional family symmetries to explain flavor. We find that the kind of models explaining muon g-2 can have as well LFV predictions of experimental interest.

Primary authors: UN, Cem Salih (Bursa Uludag University); LOLA, Magda; GOMEZ, Mario E.; SHAFI, Qaisar

Presenter: GOMEZ, Mario E.

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