## X NExT PhD Workshop



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## Lepton Flavour Non-Universality in U(1) Extended MSSMs

Wednesday 31 March 2021 16:42 (6 minutes)

We studied phenomenological implications of numerous Lepton Flavour Non-Universal U(1)' sub-models in the U(1) extended Supersystemetric Model (UMSSM) In doing this, we started with anomaly cancellation criteria to generate a number of solutions in which the extra U(1) charges of the particles are treated as free parameters. We imposed existing bounds coming from colliders and astrophysical observations on the assumed sub-models and observed that current limits dictate certain orientations. Related with potential impact of non-universal charges on the Z' decays we made predictions for the existing and future experiments. We also probe the signatures of the lepton non-universality at the future Linear Colliders.

Presenter: Dr HICYILMAZ, Yasar (University of Southampton)

Session Classification: Student Session