

# DISCRETE 2014: Fourth Symposium on Prospects in the Physics of Discrete Symmetries



Contribution ID: 71

Type: **not specified**

## Phenomenology of discrete symmetries

*Friday, 5 December 2014 18:30 (25 minutes)*

Discrete symmetries play a crucial role in physics beyond the Standard Model. Focusing on supersymmetric models which aim at explaining the family structure of quarks and leptons, I first discuss how Abelian discrete symmetries such as e.g. R-parity can emerge from an underlying U(1) family symmetry. Non-Abelian discrete family symmetries are motivated by the observation of large and very peculiar mixing angles in the neutrino sector. I review their implementation in supersymmetric models and briefly comment on the implications arising from the measurement of a non-zero reactor neutrino mixing angle.

**Primary author:** LUHN, Christoph (University of Siegen)

**Presenter:** LUHN, Christoph (University of Siegen)

**Session Classification:** Parallel 7: Supersymmetry, Supergravity, Strings, Branes