Portorož 2021: Physics of the Flavourful Universe

Contribution ID: 12

Type: not specified

## An SU(5) Unification Model

Thursday 23 September 2021 09:25 (25 minutes)

I will present the most minimal realistic SU(5) unification model to date and discuss its main predictions. The particle content of the model is built entirely out of the first five non-trivial representations of the lowest dimensionality. It consequentially connects the neutrino mass generation mechanism to the experimentally observed mass disparity between the down-type quarks and charged leptons. The minimality of the particle content dictates that the neutrinos are purely Majorana fermions while one of the three neutrinos in the model is a massless particle.

Primary author: DORŠNER, Ilja (University of Split)
Presenter: DORŠNER, Ilja (University of Split)
Session Classification: BSM

Track Classification: BSM