FLASY 2025 - 11th Workshop on Flavour Symmetries and Consequences in Accelerators and Cosmology



Contribution ID: 24 Type: not specified

Flavored Peccei-Quinn symmetries in the minimal vDFSZ model

Thursday 3 July 2025 14:50 (20 minutes)

In this talk, I will describe minimal DFSZ models extended with two right-handed neutrinos to realize the minimal type-I seesaw mechanism. The models incorporate flavored U(1) PQ symmetries that account for the observed pattern of quark and lepton masses and mixings. I will discuss the resulting phenomenology, including axion dark matter and cosmology, axion couplings to photons and fermions, highlighting the implications for flavor-violating axion interactions.

Authors: ROCHA, José (CFTP-IST, Lisbon); CÂMARA, Henrique (CFTP-IST, Lisbon); JOAQUIM, Filipe (CFT-

P-IST, Lisbon)

Presenter: ROCHA, José (CFTP-IST, Lisbon) **Session Classification:** Parallel session I