Contribution ID: 3 Type: Regular talk (15'+5')

Leptogenesis within a scotogenic model

Monday 4 December 2023 11:20 (20 minutes)

I will present a rather generic scotogenic model to provide a solution to neutrino masses, dark matter, and the baryon antibaryon asymmetry, while accommodating the current tension on the anomalous magnetic moment of the muon. The viable region of the parameter space is determined through a Markov Chain Monte Carlo numerical code, and satisfies both dark matter observables and lepton flavor violation constraints. Then, I will present a solution to the baryon antibaryon asymmetry via leptogenesis within this scotogenic model.

 $\textbf{Authors:} \ \ \text{ALVAREZ, Alexandre; BANIK, Amitayus (University of W\"{u}rzburg); Dr HERRMANN, Bj\"{o}rn (LAPTH); SARAZIN, Amitayus (University of W\"{u}rzburg); Dr HERRMANN, Bj\"{o}rn (LAPTH); SARAZIN, Amitayus (University of W\ddot{u}rzburg); Dr HERRMANN, Bj\"{o}rn (LAPTH); SARAZIN, Amitayus (University of W\ddot{u}rzburg); Dr HERRMANN, Bj\"{o}rn (LAPTH); SARAZIN, Amitayus (University of W\ddot{u}rzburg); Dr HERRMANN, Bj\"{o}rn (LAPTH); SARAZIN, Amitayus (University of W\ddot{u}rzburg); Dr HERRMANN, Bj\"{o}rn (LAPTH); SARAZIN, Amitayus (University of W\ddot{u}rzburg); Dr HERRMANN, Bj\"{o}rn (LAPTH); SARAZIN, Amitayus (University of W\ddot{u}rzburg); Dr HERRMANN, Bj\"{o}rn (LAPTH); SARAZIN, Amitayus (University of W\ddot{u}rzburg); Dr HERRMANN, Bj\"{o}rn (LAPTH); SARAZIN, Amitayus (University of W\ddot{u}rzburg); Dr HERRMANN, Bj\"{o}rn (LAPTH); SARAZIN, Amitayus (University of W\ddot{u}rzburg); Dr HERRMANN, Bj\"{o}rn (LAPTH); SARAZIN, Amitayus (University of W\ddot{u}rzburg); Dr HERRMANN, Bj\"{o}rn (LAPTH); SARAZIN, Amitayus (University of W\ddot{u}rzburg); Dr HERRMANN, Bj\"{o}rn (University of W\ddot{u}rzburg); Dr HERRMANN, Bj\r{o}rn (University of Warzburg); Dr HERRMANN, Bj\r{o}r$

Maud; Dr CEPEDELLO, Ricardo (University of Würzburg); POROD, Werner; SCHNELKE, Moritz

Presenter: SARAZIN, Maud