

# **Complementarity Probes of BSM between Sky and the Lab via RGE: Higgs Inflation and Inflaton Hunt at Light Dark Sector Experiments**

*Monday, 28 June 2021 15:00 (1 hour)*

We investigate in a conformally extended BSM scenarios radiative plateau Higgs inflation while dynamically generating the Electroweak and Seesaw scales via Coleman-Weinberg. The inflationary flat potential is a result of cancellations of quantum corrections between the gauge and Yukawa couplings. We show the theoretically consistent parameter space regions in LHC searches for this particle as well as in CMB. Thus we will conclude by promoting RGE as a novel connection to complement laboratory searches of BSM with cosmological observables as probes of BSM models.

**Presenter:** GHOSHAL, Anish (Laboratori Nazionale Frascati - I.N.F.N. & University Roma Tre)

**Session Classification:** Tor Vergata String Seminars