

# HEP2023 - 40th Conference on Recent Developments in High Energy Physics and Cosmology, Ioannina, Greece



Contribution ID: 59

Type: **not specified**

## T-Model Higgs Inflation In Supergravity

*Friday 7 April 2023 17:00 (20 minutes)*

We propose a modification of no-scale supergravity models which incorporates sgoldstino stabilization and supersymmetry (SUSY) breaking with a tunable cosmological constant by introducing a Kahler potential which yields a kinetic pole of order one. The resulting scalar potential may develop an inflection point close to which an inflationary period can be realized for subplanckian field values consistently with the observational data. For central value of the spectral index  $n_s$ , the necessary tuning is of the order of  $10^{-6}$ , the tensor-to-scalar ratio is tiny whereas the running of  $n_s$  is around  $-3 \times 10^{-3}$ . Our proposal is compatible with high-scale SUSY and the results of LHC on the Higgs boson mass.

**Primary author:** PALLIS, Constantinos (Aristotle University of Thessaloniki)

**Presenter:** PALLIS, Constantinos (Aristotle University of Thessaloniki)

**Session Classification:** Parallel (Theory)