

# Anti-de Sitter Wormholes as seeds for Higgs Inflation

*Wednesday, September 24, 2025 5:15 PM (15 minutes)*

The current experimental data suggest that the Standard Model Higgs potential is metastable, with a second, deeper AdS minimum emerging at high scales. Assuming that the Higgs boson initially resides in this AdS minimum, this talk will explore how the presence of axionic fields or magnetic radiation can catalyze the onset of inflation through asymptotically AdS Euclidean wormholes. The initial conditions for inflation are naturally set in place.

**Primary author:** GIALAMAS, Ioannis (Laboratory of High Energy and Computational Physics, NICPB, Tallinn)

**Presenter:** GIALAMAS, Ioannis (Laboratory of High Energy and Computational Physics, NICPB, Tallinn)

**Session Classification:** Parallel 5

**Track Classification:** Parallel