

Warped Relaxion

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The relaxion proposal is a new alternative to justify the smallness of the Higgs mass. The idea is to explain the radiative stability of the Higgs sector through the cosmological relaxation mechanism of the electroweak scale. Typically, in this framework, the effective Higgs mass is scanned by a scalar field (the relaxion) starting at some large value which slowly decreases during inflation. We propose a UV completion for the relaxion idea in the context of warped extra dimension scenarios. In our construction, the warp factor can naturally explain the large hierarchy between the decay constants in the relaxion potential.

Author's Name

Nayara Fonseca

Author's Institute

DESY

Author's e-mail

nayara.fonseca@desy.de

Abstract Title

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Subject

BSM+DM

Authors: FONSECA, Nayara (DESY); Dr VON HARLING, Benedict (DESY); Dr DE LIMA, Leonardo (IFT, Sao Paulo); Mrs S. MACHADO, Camila (IFT, Sao Paulo); Prof. SERVANT, Geraldine (DESY and U. Hamburg)

Presenter: FONSECA, Nayara (DESY)

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