Joint Seminar: DFT (IFIN-HH) & "Geometry&Physics@DFT" (IFIN-HH) (Geometry&Physics Homepage) (DFT Seminars webpage)

Date: Wednesday, May 24, 2023, 12:00 noon

Location: DFT seminar room, DFT building, Atomistilor 407, Magurele 077125

Speaker: Prof. Goran Djordjevic (Nis University)

Title: Tachyon constant-roll inflation in Randall-Sundrum cosmology

Abstract: A model of (constant-roll) inflation, where the second slow-roll parameter η remains constant, has been investigated. In this case the equation for the Hubble rate has an analytical solution, which describes four possible scenarios of inflation. The corresponding observational parameters n_s and r are determined and their values are compared with observational data.

The scenario when inflation is driven by a tachyon field in the framework of Randall-Sundrum II cosmology is considered and compared with the "standard" one. We reconstruct the potential which correspond to the model with constant η , and discuss an attractor behaviour in the model.