

Analytic Infinite Derivative (AID) gravity

Thursday, 10 October 2019 15:40 (35 minutes)

I will explain how theories with analytic functions of derivatives are connected to strings and in particular arise in string field theory (SFT) and will spend the most part of my talk on the good and unrevealed properties of analytic infinite derivative (AID) gravity. In particular, I will discuss questions of avoiding singularities as well as possible observational evidences for such a non-local modification of Einstein's theory. Namely, imprints in inflationary spectra including non-gaussianities. On top of this I will raise several purely mathematical questions which need to be solved in order to push the physics developments further.

Primary author: KOSHELEV, Alexey (Univ. of Beira Interior)

Presenter: KOSHELEV, Alexey (Univ. of Beira Interior)