Contribution ID: 4

Type: not specified

Stringy quintessence models in the swampland

Monday, 13 June 2022 17:30 (35 minutes)

The embedding of accelerated expansion, in particular our past and present cosmology, in string theory remains an open problem in string phenomenology. Certain swampland conjectures place stringent bounds on such models. In this talk I will focus on multifield quintessence in the late universe, and the search for transients close to the cosmological parameters today. I will conclude that typical stringy models do not have observationally compatible trajectories, if one starts with matter-dominated initial conditions. I will also describe universal, compatible trajectories starting from early phases of kinetic domination, however these favorable initial conditions are harder to justify.

Presenter: BRINKMANN, Max (University of Bologna and Padova)