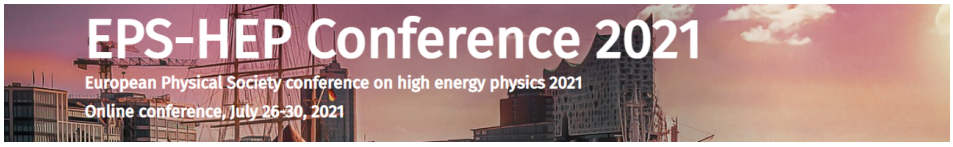

Contribution ID: **1120** Type: **Parallel session talk**

Inflation with strongly non-geodesic motion: theoretical motivations and observational imprints

Thursday, 29 July 2021 17:10 (20 minutes)

A new class of inflationary attractors characterized by a strongly non-geodesic motion has been discovered in the past few years. I will describe how they naturally arise in negatively curved field space, allowing to inflate on potentials that are steep in Planck units. In these scenarios, primordial fluctuations often experience a transient tachyonic instability, akin to the one occurring in axion gauge-field inflation, and which can be described by a single-field effective field theory with imaginary sound speed. Independently of its precise origin, I will show how this leaves a peculiar imprint in the form of primordial non-Gaussianities of flattened type for all higher-order correlation functions, and I will mention links with primordial black holes and specific signatures in the stochastic gravitational wave background.

First author

Sébastien Renaux-Petel

Email

renaux@iap.fr

Collaboration / Activity

Theory/observation

Primary author: RENAUX-PETEL, Sébastien (Institut d'Astrophysique de Paris)

Presenter: RENAUX-PETEL, Sébastien (Institut d'Astrophysique de Paris)

Session Classification: T02: Cosmology

Track Classification: Cosmology