



Contribution ID: 34

Type: **not specified**

UV-completing Ghost Inflation

Monday 14 April 2014 15:45 (20 minutes)

We present a setup that provides a UV-completion of the ghost inflation model up to a scale which can be almost as high as the Planck mass. This is achieved by coupling the inflaton to the Lorentz-violating sector described by the Einstein-aether theory or its khronometric version. Compared to previous works on ghost inflation our setup allows to go beyond the study of small perturbations and include the background dynamics in a unified framework. In the specific regime when the expansion of the Universe is dominated by the kinetic energy of the inflaton we find that the model predicts rather high tensor-to-scalar ratio $r \sim 0.1$ and non-Gaussianity of equilateral type with $f_{NL} \sim -40$.

Primary author: SIBIRYAKOV, Sergey (CERN & EPFL)

Co-author: IVANOV, Mikhail (Moscow State University)

Presenter: SIBIRYAKOV, Sergey (CERN & EPFL)

Session Classification: Afternoon session

Track Classification: Astroparticles