



Contribution ID: 293

Type: **not specified**

On anomalous production of slow gravitinos in minimal supergravity inflation and its resolution

Tuesday 24 August 2021 17:40 (20 minutes)

In the “Minimal Supergravity Inflation”, whose only degrees of freedom are the (real) inflaton, gravitino, and graviton, an issue of the catastrophic production of slow gravitinos after inflation has been reported. We will briefly comment on the origin of such catastrophic production and propose an alternative model with the same physical degrees of freedom that is free from the issue. We utilize a cubic nilpotent superfield to realize it and demonstrate that inflation is possible in this framework. However, even though there is no issue of gravitino production related to the sound-speed change, the standard gravitino problem turns out to be severe.

Author: Dr TERADA, Takahiro (Institute for Basic Science)

Presenter: Dr TERADA, Takahiro (Institute for Basic Science)

Session Classification: Early Universe Cosmology

Track Classification: Early Universe Cosmology