Contribution ID: **53** Type: **not specified**

Inflation and current couplings in the Einstein-Cartan gravity

Wednesday 25 September 2024 14:48 (16 minutes)

Einstein–Cartan $f(R)$ theory is known not to induce an additional scalar degree of freedom, the scalaron, contrary to the case in the metric formalism. In this research, we show that by including other geometric quantities in the Einstein-Cartan gravity such as the Nieh-Yan and the Holst term, it is possible to have a propagating scalaron and realize alpha-attractor inflation and its deformation. We also discuss matter currents coupled to the scalaron in this setup.

Primary authors: MUKAIDA, Kyohei (KEK); HE, Minxi (IBS); HONG, Muzi (The University of Tokyo)

Presenter: HONG, Muzi (The University of Tokyo)

Session Classification: Parallel Wednesday Cosmo 2

Track Classification: Cosmology & Astroparticle Physics