



Contribution ID: 750

Type: **Talk in the parallel session**

## **Alleviating $H_0$ and $\sigma_8$ tensions with $f(T)$ gravity, using the effective field theory approach**

*Thursday, July 8, 2021 5:33 PM (19 minutes)*

We report how to alleviate both the  $H_0$  and  $\sigma_8$  tensions simultaneously within torsional gravity from the perspective of effective field theory. Following these observations, we construct concrete models of Lagrangians of torsional gravity. Specifically, we consider a novel  $f(T)$  parametrization where two out of the three parameters are independent. This modified gravity model can efficiently fit observations alleviating the two tensions simultaneously, hence offering an additional argument in favor of gravitational modification.

**Author:** Prof. SARIDAKIS, Emmanuel (National Observatory of Athens)

**Presenter:** Prof. SARIDAKIS, Emmanuel (National Observatory of Athens)

**Session Classification:** Status of the  $H_0$  and  $\Sigma_8$  Tensions: Theoretical Models and Model-Independent Constraints

**Track Classification:** Cosmic Microwave Background: Status of the  $H_0$  and  $\sigma_8$  tensions: theoretical models and model-independent constraints