



Contribution ID: 87

Type: **not specified**

## Alleviating both $H_0$ and $\sigma_8$ tensions through modified entropies

*Thursday, 14 September 2023 15:50 (20 minutes)*

We investigate the alleviation of both  $H_0$  and  $\sigma_8$  tensions simultaneously within the framework of Tsallis cosmology. Such a modified cosmological scenario is obtained by the application of the gravity-thermodynamics conjecture, but using the non-additive Tsallis entropy, instead of the standard Bekenstein-Hawking one. Hence, one obtains modified Friedmann equations, with extra terms that depend on the new Tsallis exponent  $\delta$ . By selecting specific values for the  $\delta$  parameter we can obtain a phantom effective dark energy, which implies faster expansion, which is one of the sufficient mechanisms that are capable of alleviating the  $H_0$  tension. Additionally, for the same parameter choice we obtain an increased friction term and an effective Newton's constant smaller than the usual one, and thus the  $\sigma_8$  tension is also solved. These features act as a significant advantage of Tsallis modified cosmology.

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