

On the Viability of Chameleon Gravity in Galaxy Clusters and Cosmic Voids

Friday 10 September 2021 15:10 (20 minutes)

In this talk I will review the recent results of a numerical study of chameleon gravity in the context of galaxy clusters and cosmic voids. In this study we solved the chameleon field equation for NFW halos and cosmic void density profiles for the currently observationally viable chameleon models. The obtained results shine light on the non-trivial relationship between the NFW halo parameters and the chameleon acceleration and have important implications for the future observational searches for the fifth force.

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