

Inhomogeneous Hubble diagram from vector K-mouflage

Thursday 8 September 2022 11:30 (20 minutes)

I will present the Hubble diagram for a Universe where dark matter is universally charged under a dark non-linear electromagnetic force which features a screening mechanism of the K-mouflage type for repulsive forces. I will explicitly show that the cosmological evolution generates an inhomogeneous Hubble diagram that corresponds to a curvature dominated expansion at short distances and converges to the cosmological one of Λ CDM. We discuss the potential impact of this inhomogeneous profile on the Hubble tension.

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