

Seminar

von

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Constraints on the free-streaming properties of dark matter from strong gravitational lensing

In all dark matter models, structures in the Universe form in a hierarchical bottom-up fashion, where smaller structures form first and then merge together or accrete one another to form larger and larger structures. While most of these small structures are destroyed and totally absorbed by the new large ones, a significant number of them are able to survive till the present days within the halo of more massive galaxies and along their line-of-sight. An interesting aspect of these small structures is that their abundance strongly depends on the free streaming properties of the dark matter particles. In this seminar, I will demonstrate how strong gravitational lensing can be used to detect small mass dark matter haloes and present the latest observational constraints on the nature of dark matter.

Montag, 22. Jänner 2018, um 15:00 Uhr im HS

des Institutes für Astrophysik, Türkenschanzstraße 17, 1180 Wien