Seventeenth Marcel Grossmann Meeting



Contribution ID: 549

Type: Invited talk in a parallel session

Cosmological constraints on macroscopic dark matter

Thursday, 11 July 2024 17:40 (20 minutes)

The nature of dark matter is still a mystery. The possibility exists that dark matter is not made of elementary particles, but instead of "macroscopic" objects. In this class of scenarios, dubbed "macro DM", the small interaction rates of dark matter are achieved through a small number density, as opposed to a small cross section. Examples of macro DM include clumps of strange quark matter ("strangelets"), or primordial black holes. In our talk, after briefly reviewing the phenomenology of macro DM, we will discuss current constraints and prospects for future experiments.

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Session Classification: Absolute stability of strange quark matter: from dark matter to stellar evolution

Track Classification: Compact Objects and Stellar Evolution (CO): Absolute stability of strange quark matter: from dark matter to stellar evolution