International Joint Workshop on the Standard Model and Beyond 2024 & 3rd Gordon Godfrey Workshop on Astroparticle Physics

Contribution ID: 29

Type: not specified

Constraining millicharged dark matter with gravitational positivity bounds

Thursday 12 December 2024 14:30 (20 minutes)

Positivity bound is one of the UV-IR consistency conditions which can be derived from fundamental principles such as unitarity and causality. Recently, it has been studied to incorporate gravity effects to the positivity constraints and apply them to various phenomenologies. In this talk, we study the implications of the gravitational positivity bound for dark matter. In particular, we focus on the millicharged dark matter and constraint their parameter spaces.

Author: KIM, Suro

Presenter: KIM, Suro

Session Classification: Dark Matter