



Contribution ID: 33

Type: Long talk (20 mins)

Can Primordial Black Hole Clusters Evade Microlensing Constraints?

Thursday, 15 December 2022 15:30 (30 minutes)

Stellar microlensing strongly constrains the fraction of dark matter in compact objects, such as primordial black holes (PBHs). However, PBHs are expected to form clusters, and it has been argued that these constraints are therefore weakened or evaded. I will present a plausible PBH cluster model for the most commonly-studied PBH formation mechanism: the collapse of large curvature perturbations generated by inflation. I will then discuss the impact of these PBH clusters on stellar microlensing constraints.

Type of presentation

20 minute talk

Would you be interested in receiving feedback on your presentation?

Yes

Are you happy for your talk to be recorded?

Yes

Other categories:

Primordial Black Holes

Please select the most relevant category

Astroparticle

Primary author: GORTON, Matthew (University of Nottingham)**Presenter:** GORTON, Matthew (University of Nottingham)**Session Classification:** Full Length Talks