

SAIP2022

Contribution ID: 78

Type: Oral Presentation

Primordial Black Holes and the SZ effect.

Monday, 4 July 2022 15:30 (15 minutes)

Primordial black holes are a much-studied candidate for dark matter. In the mass regime where their conjectured Hawking evaporation is significant, they have been subject to many constraints via X-rays, gamma-rays, and even radio emission. Previously the Sunyaev-Zel'dovich effect (SZE) has been considered to place further limits on the primordial black hole abundance via the effects of their accretion of ambient gas. In this work we will present a novel means of placing such limits, using the SZE induced by electrons produced via Hawking radiation in galaxies and galaxy clusters.

Apply to be considered for a student ; award (Yes / No)?

N/A

Level for award; (Hons, MSc, PhD, N/A)?

N/A

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Track Classification: Track D1 - Astrophysics