Type: Talk

Primordial Kerr Black Holes

Thursday 30 July 2020 09:55 (25 minutes)

Primordial Black Holes (PBHs) are appealing candidates for dark matter in the universe but are severely constrained by theoretical and observational constraints. I will focus on the Hawking evaporation limits extended to Kerr Black Holes. These results have been obtained with a new code entitled BlackHawk that I will briefly present. In particular, I will review the isotropic extragalactic gamma ray background constraint and show that the "window" in which PBHs can constitute all of the dark matter depends strongly on the PBH spin. Finally, I will present a way to distinguish between Black Holes of primordial and of stellar origins based on the Thorne limit on their spin.

Secondary track (number)

09

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