

Primordial black hole dark matter and ways to find it

Thursday 30 July 2020 08:35 (25 minutes)

Primordial black holes (PBHs) constitute an attractive candidate for dark matter. I will describe a new generic mechanism for PBH formation from fragmentation of scalar fields. Then, I will revisit PBH formation from vacuum bubbles during inflation and show how resulting broad PBH mass-spectrum can simultaneously account for dark matter, reported HSC candidate, LIGO events as well as seeds of supermassive black holes. Finally, I will discuss how interactions with compact stars can shed light on small PBHs of “sublunar” mass that can compose all of the dark matter.

I read the instructions

Secondary track (number)

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