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Type: **Parallel talk**

Primordial black holes in multi-field inflation models

Tuesday, 20 June 2017 17:00 (15 minutes)

We consider formation of primordial black holes (PBHs) in multi-field inflation models (double inflation or axion curvaton model) and discuss the possibility that produced PBHs account for the observed gravitational events by LIGO or all dark matter of the universe. We point out that the current pulsar timing array (PTA) experiments already put severe constraints on gravitational waves generated via the second-order effects. It is shown that the multi-field inflation models can produce PBHs with sharp mass spectrum and evade the PTA constraint. Furthermore, PBHs produced in double inflation can account for all dark matter.

Presentation type

Parallel talk

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