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Type: Talk

Spinning Primordial Black Holes from First Order Phase Transitions

Wednesday 20 December 2023 15:30 (15 minutes)

This talk concerns a novel study to obtain the initial spin of the primordial black holes created during a firstorder phase transition due to delayed false vacuum decay. Remaining within the parameter space consistent with observational bounds, the abundance and the initial spin of the primordial black holes are expressed as functions of the phase transition parameters. The abundance of the primordial black holes is extremely sensitive to the phase transition parameters. It was also found that the initial spin weakly depends on all parameters except the transition temperature.

Designation

Student

Reference publication/preprint

Institution

IISER Berhampur

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