Gravitational Wave Probes of Physics Beyond Standard Model 2

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Gravitational Waves from Feebly Interacting Particles in a First Order Phase Transition

Tuesday 29 Nov 2022 at 17:30 (00h30')

Content :

In this talk, we will discuss a novel source of gravitational waves from first order phase transitions beyond the ones conventionally studied in the literature (scalar field and sound waves): feebly interacting particles. If such particles carry a significant fraction of the energy released in the transition, they can generate gravitational wave signals that have qualitatively distinct characteristics compared to conventional sources and are potentially observable with near-future detectors.

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