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Electroweak phase transition in the nearly aligned Higgs effective field theory

Thursday, 7 July 2022 17:15 (15 minutes)

The first-order electroweak phase transition (FOEWPT) plays an important role in the scenario of electroweak baryogenesis. In this talk, we discuss the first-order phase transitions in a new effective field theory. We show that the SMEFT is not appropriate when we discuss the FOEWPT. We also show that the parameter regions satisfying the sphaleron decoupling condition can be searched at future collider experiments such as the HL-LHC, ILC and future gravitational wave observations such as the DECIGO. This talk is based on arXiv:2202.12774.

In-person participation

Yes

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