Contribution ID: 82 Type: poster

Poster: EFT for supercooled phase transitions in the early Universe

We analyze the role of higher-order thermal corrections for supercooled phase transition, and to what extent they can be computed using dimensionally reduced effective field theory (3D EFT). This framework requires high-temperature (HT) expansion to be valid, which seems challenging due to the presence of supercooling. We show how to reliably use the HT expansion in dimensionally reduced theory for the calculation of bubble nucleation rate, and apply it to a classically scale-invariant model

These corrections affect the predictions significantly e.g. transition temperature and scale. We compare new results to the ones obtained using the most common scheme based on the so-called daisy resummation.

Would you be interested in presenting a poster? (this will not impact the decision on your talk)

yes

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Session Classification: Reception and Poster Session