

Improved precision for gravitational waves from scale symmetry breaking: how to supercool at high temperature?

Thursday 11 January 2024 10:45 (45 minutes)

This talk will discuss various aspects of predicting gravitational-wave signals from supercooled first-order phase transitions in models with classical scale invariance. Motivated by great prospects for observation of such a gravitational-wave signal, and by the consequent opportunities for reconstructing the parameters of the phase transition and the underlying model, I will present the route to improved accuracy in formulating theoretical predictions. I will explain how to employ the high-temperature effective field theory approach for studying supercooled phase transitions and compare the resulting predictions with those obtained with the common daisy-resummed potential.

Presenter: SWIEZEWSKA, Bogumila (University of Warsaw)