

Tracking Minima, Phase Transitions and Gravitational Waves with BSMPTv3

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We present an update of our code BSMPT that allows for the detailed study of phase transitions between evolving minima in the one-loop daisy-resummed finite-temperature effective potential.

BSMPTv3 tracks temperature-dependent coexisting minimum phases, calculates the bounce solution for regions of coexisting minima, and determines the characteristic temperatures and parameters of found first-order phase transitions and signals of sourced gravitational waves.

We compare BSMPTv3 to the widely-used code CosmoTransitions and comment on our respective improvements.

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