

Workshop on Grand Unified Theories: Phenomenology and Cosmology (GUTPC)

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Revisiting Metastable Cosmic String Breaking

Wednesday, 10 April 2024 10:30 (30 minutes)

In this talk, I will discuss the decay of metastable cosmic strings. By moving beyond the conventional thin string approximation, we explore the dynamics of cosmic strings with finite sizes, addressing a critical gap in previous estimates. This approach yields a more reliable lower limit on the tunneling rate, challenging earlier assumptions. The significance of these findings is underscored by their potential connection to gravitational wave signals detected in pulsar timing experiments, offering new perspectives in the study of cosmic strings within the framework of grand unified theories.

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