JOINT TUFTS/MIT COSMOLOGY SEMINAR

Gravitational self-interactions of cosmic string loops

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Gravitational wave signals from cosmic strings are strongly influenced by the presence and character of generic features on string loops known as kinks and cusps. We find analytically the leading-order effect of gravitational self-interactions on strings near kinks and cusps, and discuss how these effects might influence loop evolution. We show the results of numerically evolving particular kinds of loops undergoing self-interactions, and comment on how the gravitational wave spectrum from loops might be affected.

Tuesday, November 6, 2018, 2:30 pm

574 Boston Ave, Room 310

Tufts University

Refreshments at 2:00 outside room 304