JOINT TUFTS/MIT COSMOLOGY SEMINAR

Gravitational Wave Probes of Parity Violation

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In this talk I will discuss gravitational parity violation and its effects on gravitational and cosmological observables. I will first introduce a theory-agnostic parameterization to characterize both amplitude and velocity birefringence in gravitational-wave (GW) propagation as a result of parity violation. Then, I will discuss how these effects can be probed with GW observables, including the stochastic gravitational-wave background and multi-messenger GW/EM events. Lastly, I will discuss how chiral gravitational waves can lead to observable signatures in large scale structure.

Tuesday, November 19, 2024, 2:30 pm

574 Boston Ave, Room 402

Tufts University

Refreshments at 2:00 outside room 304