## JOINT TUFTS/MIT COSMOLOGY SEMINAR

## Particle Phenomenology with Gravitational Waves Djuna Croon Dartmouth

In this talk I will consider what a particle physicist may learn from gravitational wave astronomy. In particular, I will discuss how binary mergers can be affected by the presence of Dark Matter, and how the gravitational wave form would be modified as a result. I will also discuss the stochastic background, and the expected signals from exotic compact objects and halo substructure. Finally, I will talk about signs of new physics in the gravitational wave spectra of cosmic phase transitions.

Tuesday, May 1, 2018, 2:30 pm 574 Boston Ave, Room 310 Tufts University

Refreshments at 2:00 outside room 304