



Applied and Computational Mathematics Seminar

Title: Imprint of Precession on Gravitational Waves

Speaker: Jonathan Thompson

Date: Mon 28th March 2022 at 3:00PM

Location: Seminar Room SCN 1.25

Abstract: Merging compact bodies have become a plentiful source of gravitational waves observed by the ground-based detectors of the LIGO-Virgo-KAGRA collaboration, and imprinted on these signals are the fingerprints of the binary configurations from which the gravitational waves were emitted. Through analytical and numerical modelling efforts we are able to connect the various dynamical features of the binary to their impacts on the radiated signals, thereby inferring information about compact binary populations and formation mechanisms from the growing catalog of detected events. In this talk I will briefly discuss the influence of spinning bodies on gravitational wave signals, in particular spins misaligned with the binary's orbital angular momentum.

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