## Fall 2019 Physics & Astronomy Seminar Speaker



**Neil Cornish** Montana State University November 22, 2019 3:10-4:00 pm Physical Sciences Building, Room 234

## "Gravitational Wave Astronomy: Now and When"

**Abstract:** It is now four years since the first detection of gravitational waves from a binary black hole merger, and two years since the first detection of a binary neutron star merger and subsequent kilonova explosion. The LIGO and Virgo detectors are now recording events on a weekly basis, and providing unique insights into the properties of some of the most extreme phenomena in the Universe. In the near future, a galactic-scale gravitational wave detector - built from pulsars - will detect the signals from supermassive black hole binaries, and a space based detector will open up the source-rich milli-Hertz frequency band. Please join me for a whirlwind tour of the past, present and future of gravitational wave astronomy.



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