The detectability of long-duration gravitational wave signals

Thursday, 8 July 2021 16:50 (20 minutes)

Spinning neutron stars are sources of long-duration continuous waves that may be detected by interferometric detectors. We focus on long, but not infinite duration signals and derive the precise signal-to-noise ratio (SNR) when the duration is not a priori known. We illustrate the effect of gaps in the data on the SNR.

Primary authors:  FESIK, Liudmila (MPI for Gravitational Physics, Germany);  Dr PAPA, Maria Alessandra

Presenter:  FESIK, Liudmila (MPI for Gravitational Physics, Germany)

Session Classification: Numerical Relativity and Gravitational Wave Observations

Track Classification: Gravitational Waves: Numerical Relativity and Gravitational Wave Observations