

Gravitational waves from magnetar glitches and anti-glitches

Tuesday, 11 July 2023 11:20 (20 minutes)

In this talk, I will introduce a simple toy model that can simultaneously explain magnetar glitches and anti-glitches. It is based on the idea of mass ejection from the magnetar and how its magnetic field plays an important part in sustaining the mass quadrupole required for gravitational wave emission. I will use astrophysical arguments to argue that the continuous gravitational waves emitted will be transient in nature and I will comment on whether they will be detectable with future decihertz detectors, like DECIGO and the Big Bang Observer.

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Session Classification: Neutron stars 1