

## Dynamical tidal resonances in EMRIs

*Thursday, 21 September 2023 10:00 (30 minutes)*

Resonances are ubiquitous in nature. In this talk, I will focus on resonances due to the interaction of two stellar-mass black holes orbiting a central massive black hole. Such tidal resonances will generically occur for Extreme Mass Ratio Inspirals (EMRIs), if nearby compact objects exist. By probing their influence on the EMRI waveform, we can in principle extract information about the environmental tidal field of the EMRI system, albeit at the cost of a more complicated EMRI waveform model.

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**Session Classification:** Environmental Effects