

# Extreme mass-ratio inspirals: population and environments

*Friday, 17 October 2025 10:30 (60)*

In this talk, I will discuss recent developments in the science of extreme mass-ratio inspirals (EMRIs), which are one of the main targets of spaceborne gravitational wave detectors. I will review their population models and major astrophysical environmental effects, including accretion disk, stellar neighbours, and dark matter. I will explain why both indirect and direct measurements can be both used to infer properties of the EMRI environments.

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**Session Classification :** Plenary