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## 3-body systems in strong-gravity

*Wednesday 13 August 2025 10:45 (45 minutes)*

I will present a novel approach to study the dynamics of 3-body systems in a regime of strong gravity, going beyond the point-particle description typically used in the literature. Among other things, I will show how the inclusion of strong-gravity effects from a third body can significantly reduce the merger time of a binary system, affecting also the emitted gravitational wave signal. I will apply this approach to study the so-called precession resonances, revealing that, including strong gravitational effects, one obtains a richer physics for the system under investigation.

**Presenter:** ORSELLI, Marta