Seventeenth Marcel Grossmann Meeting



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Type: Invited talk in a parallel session

Quasi Periodic Eruptions as EMRIs counterparts

Tuesday, 9 July 2024 16:00 (20 minutes)

Quasi Periodic Eruptions (QPEs) are a puzzling X-ray phenomena recently discovered in a number of sources with similar properties. In this talk, I am going to present a theoretical model that is able to reproduce their phenomenology in at least 4 sources. The QPEs arise from impacts between an Extreme Mass Ratio Inspiral (EMRI) object and a rigidly precessing TDE-like accretion disc. Since there seems to be a hint of correlation between some of the sources properties and TDEs host galaxy properties, modelling QPEs might eventually improve our understanding of the TDE demographics.

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Session Classification: Repeating transients in galactic nuclei: confronting observations with theory

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