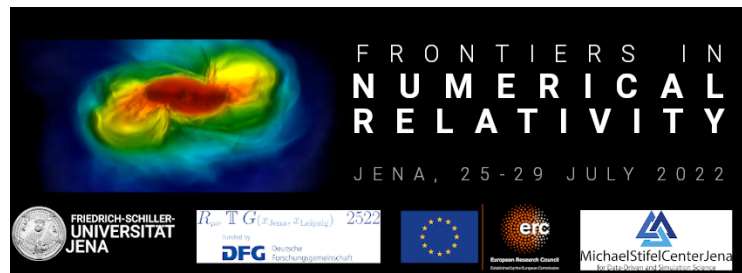


Frontiers in Numerical Relativity 2022 (FNR2022)



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Dynamical friction from ultralight dark matter

Thursday, 28 July 2022 12:30 (15 minutes)

A promising way to study the properties and behaviour of dark matter on small scales is through the effects it may have on binary mergers. In particular, its presence around black holes may lead to a distinctive dephasing of the signal due to dynamical friction. In this talk I will present how we calculate this force numerically and discuss how our findings extend some already existing analytic results to the relativistic regime, where this effect can become detectable.

Presenter: Dr TRAYKOVA, Dina (MPI for Gravitational Physics (AEI), Potsdam)

Session Classification: Short talks