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Scattering amplitudes and conservative dynamics at the fourth post-Minkowskian order

Wednesday 27 April 2022 15:00 (30 minutes)

Recently many of the advanced methods originally developed in the context of collider phenomenology have found important applications to the general relativistic two-body problem.

I will describe how on-shell scattering amplitudes, effective field theory and multi-loop integration methods allow to extract observables for the conservative binary dynamics at fourth post-Minkowskian order and lay out challenges faced in present and future computations challenges.

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