Seminar: Supertranslations from Scattering Amplitudes

Thursday 3 July 2025 14:30 (45 minutes)

On-shell methods have found a new application to local observables such as asymptotic radiation fields and gravitational waveforms. While these observables are invariant under small gauge transformations, they are known to depend on a choice of asymptotic gauge; in gravity on asymptotically Minkowski spacetimes, this is a choice of BMS frame. In this talk, I will describe a method for capturing these supertranslations, to all orders in perturbation theory, using the on-shell framework of scattering amplitudes.

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