11th KSETA Plenary Workshop 2024



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Field Theory Tools for Gravitational Wave Physics (online)

Friday, March 15, 2024 11:00 AM (1 hour)

In the last few years a collection of novel approaches have lead to spectacular progress in the Post-Minkowskian description of the motion and gravitational wave emission of a two-body system. Analytical results in such approaches are obtained by studying a hyperbolic encounter using computational tools from high energy particle physics. These results can then be analytically continued to bound systems via the boundary-to-bound (B2B) dictionary, producing high-precision data needed for the construction of waveform templates. I will introduce the framework in which we perform these computations, talk a little bit about the computational tools, and review the ideas underlying the B2B map.

Presenter: KÄLIN, Gregor

Session Classification: Plenary Meeting