

Calculating the static gravitational two-body potential to fifth post-Newtonian order with Feynman diagrams

Wednesday, September 11, 2019 11:00 AM (25 minutes)

The effective field theory approach to general relativity allows to apply techniques for computing Feynman diagrams used in high energy physics in order to calculate the gravitational two-body potential. In the talk I will discuss the first-time calculation of the static two-body potential to fifth post-Newtonian order. These results were achieved thanks to a manifest factorization property of Feynman diagrams. The talk is based on arXiv:1902.10571.

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