

Polytopes from amplitudes

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Scattering amplitudes and other quantities in physics are given by enormous, intricate sums that are very challenging to compute in practice. A powerful technique is to encode the combinatorial complexity of these sums in a geometric object. I will introduce some of the beautiful polytopes that arise and discuss their rich combinatorial and algebraic structure. My talk will discuss joint work with Marcelo Aguiar and Nima Arkani-Hamed and Carolina Figueiredo, and will not assume previous knowledge of this topic.

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