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The amplituhedron and its triangulations

In 2013 Arkani-Hamed and Trnka have discovered the amplituhedron, a remarkable geometric object which encodes the scattering amplitudes of N=4 Super Yang-Mills quantum field theory.

Since its discovery, the amplituhedron was extensively studied. One of the central conjectures in the subject was that a certain collection of subspaces form a triangulation of the  $m=4$  amplituhedron. This conjecture was recently proven in a joint work with Even-Zohar and Lakrec.

In my talk I will define the amplituhedron, explain its origin and the importance of understanding its triangulations, and will review the ideas used to settle the conjecture.