

Jaroslav Trnka – Negative Amplituhedron Geometries and Amplitudes at Strong Coupling

Tuesday 28 September 2021 15:30 (1 hour)

We define negative Amplituhedron geometries which generalize the Amplituhedron picture for scattering amplitudes in planar $N=4$ SYM theory. We show that these geometries naturally describe the logarithm of the amplitude, and we use them to define a certain IR finite object as the dlog form on negative geometries. In certain limits, we determine this object to all loop orders, perform resummation and expand at strong coupling. Finally, we discuss quantitative features of our result and future work.