

REVIEW TALK - Geometries for scattering amplitudes, and beyond

Thursday 24 September 2020 13:00 (45 minutes)

In recent years it has become clear that geometrical structures underlie various observables in quantum field theories. In this talk I will describe amplituhedra, i.e. geometries encoding scattering amplitudes. These pertain to a broader family of geometries called positive geometries, whose basics I will review. The amplitudes are extracted from the canonical form with logarithmic singularities on the boundaries of these geometries. Afterwards, I will focus on maximally supersymmetric Yang-Mills theory and discuss the amplituhedron and the momentum amplituhedron. Finally, I will discuss some of the questions which remain open in this framework.

Presenter: FERRO, Livia (LMU)

Session Classification: Strings & Mathematical physics session on Zoom and in Main Auditorium.