Contribution ID: **157**   Type: **not specified**

Bootstrapping mesons at large N

Thursday 6 June 2024 13:00 (30 minutes)

Four-dimensional QCD has been known to simplify dramatically in the large N limit for decades. Yet, even in this limit, its solution still evades us. In this talk, I will discuss how one can instead proceed with a bootstrap approach to carve out the space of large N confining gauge theories that are compatible with a given set of assumptions. One expects to corner large N QCD once sufficiently many constraints are imposed. After motivating a certain set of assumptions, I will review the constraints that follow from $2{\rightarrow}2$ pion scattering for various meson couplings. We will see how some of these bounds lead to an extremal amplitude which is in uncanny agreement with real-world QCD.

Presenter: ALBERT, Jan (Stony Brook University (USA))