



ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

INSTITUT DE PHYSIQUE IPHYS

High Energy Theoretical Physics Seminar

Lundi 4 décembre 2017 à 14h

Salle N° 727, BSP (Cubotron)
EPFL

Amit Sever

(University of Tel Aviv and CERN)

"S-matrix bootstrap for large N confining gauge theories"

Abstract:

In the talk I'll consider theories of weakly interacting higher spin particles in flat spacetime. We will focus on the four-point scattering amplitude at high energies and imaginary scattering angles. Both, the leading asymptotic of the amplitude and the first sub-leading correction in this regime turn out to be universal. The leading asymptotic is equal to the corresponding limit of the Veneziano amplitude. We will compute the first sub-leading correction using a model of relativistic strings with massive endpoints and argue that it is unique using holography, the effective theory of long strings and bootstrap techniques.