

Integrability and chaos in sYM theories from the anomalous-dimension spectrum

Friday 24 September 2021 09:55 (20 minutes)

The discovery of integrability in planar $N=4$ sYM theory led to considerable advances in the computation of planar anomalous dimensions. In this talk I will discuss universal statistical properties of anomalous-dimension spectra in sYM theories in the planar limit and at finite rank of the gauge group. I will show how they can give insight into the nature of the underlying model, in particular we will see integrability manifest itself in spectra of integrable spin chains, while non-planar spectra, as well as spectra of non-integrable spin chains, can be described by random matrix theory.

Do you wish to attend the workshop on-site?

no

Summary

Primary author: SPIERING, Anne (Trinity College Dublin)

Presenter: SPIERING, Anne (Trinity College Dublin)

Session Classification: Parallel Sessions: String & Mathematical Physics

Track Classification: Strings & Mathematical Physics