Strings 2022



Contribution ID: 104

Type: Poster

Color kinematics duality for Chern-Simons theory

Chern-Simons theory obeys the color-kinematics duality off-shell, and admits an off-shell double-copy. The off-shell duality is the result of there being volume preserving diffeomorphisms hidden in the Feynman rules. This can be extended to the ghost sectors by using a suitable superspace formulation of the theory. On-shell, there is an N=4 adjoint matter theory that obeys the duality and can be double-copied, giving amplitudes of (up to) maximally supersymmetric Dirac-Born-Infeld theory in 3D.

Primary author: BEN-SHAHAR, Maor (Uppsala University)
Co-author: Prof. JOHANSSON, Henrik (Uppsala University)
Presenter: BEN-SHAHAR, Maor (Uppsala University)
Session Classification: Reception & Poster session