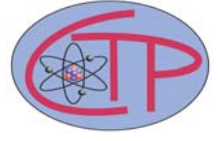




NEW YORK CITY COLLEGE OF TECHNOLOGY
Physics Department
Center for Theoretical Physics



Workshop on Recursion Relation in Yang-Mills Theory

Friday, February 10 from 2:15-4:30 pm
Namm, Room 823

This will include the following presentations:

BCFW Recursion Relation in Yang-Mills Theory and its Extension

Zhibai Zhang

Ph.D. Program in Physics, The CUNY Graduate Center

The recursion relation found by Britto, Cachazo, Feng and Witten (BCFW) is a new and more powerful method for computing amplitudes compared to Feynman diagrams. I will give a detailed proof and derivation of this recursion relation in Yang-Mills theory, a general introduction of its extensions to other field theories and its physical interpretation.

Tree-Level Color-Kinematic Duality

Chih-Hao Fu

Zhejiang University, China

An interesting Jacobi-like relation between Yang-Mills amplitudes was recently observed by Bern, Carrasco and Johansson through explicit calculations up to 8-points. As an example of an application of the BCFW technique, I shall discuss how a proof of the relation can be quickly derived from analytic properties of Yang-Mills amplitudes.