Contribution ID: **582** Contribution code: **contribution ID 582** Type: **Oral**

The static self-energy (and plaquette) at large orders in perturbation theory

Tuesday 30 November 2021 18:00 (20 minutes)

We compute the coefficients of the perturbative expansions of the plaquette, and of the self-energy of static sources in the triplet and octet representation, up to very high orders in perturbation theory. We use numerical sthocastic perturbation theory and lattice regularization. We explore if the results obtained comply with expectations from renormalon dominance, and what they may say for a model independent and nonperturbative determination of the value of the gluon condensate.

Significance

References

Phys. Rev. Lett. 108 (2012) 242002, Phys. Rev. D87 (2013) 094517

Speaker time zone

Compatible with Europe

Author: PINEDA, Antonio

Presenter: PINEDA, Antonio

Session Classification: Track 3: Computations in Theoretical Physics: Techniques and Methods

Track Classification: Track 3: Computations in Theoretical Physics: Techniques and Methods