XIIth Quark Confinement and the Hadron Spectrum



Contribution ID: 40

Type: not specified

CANCELLED: Perturbative and non-perturbative QCD parameters in Dispersive model.

Monday, 29 August 2016 17:30 (15 minutes)

coupling constant, nonperturbative QCD parameter, dispersive model.

Summary

Abstract: we study average of moments for event shapes in $e^+ e^-$ —hadrons within the context of next to leading order (NLO) perturbative QCD prediction in dispersive model. Moments used in this article are <1-T>, $\langle \rho \rangle$, $\langle B_T \rangle$, $\langle B_W \rangle$. We extract the coupling constant (α_s) in perturbative theory and α_0 in the non-perturbative theory using the dispersive model. By fitting the experimental data, we find the values of α_s (M_(Z^0))= 0.1171±0.00229 and α_0 (μ_I =2GeV)=0.5068±0.0440. Our results are consistent with the above model. Our results are also consistent with those obtained from other experiments at different energies. We explain all these features in this paper.

Primary author: Prof. ZOMORRODIAN, Mohammad Ebrahim (Ferdowsi University of Mashhad)
Co-author: Dr SALEHMOGHADDAM, Reihaneh (ferdowsi university of mashhad)
Presenter: Prof. ZOMORRODIAN, Mohammad Ebrahim (Ferdowsi University of Mashhad)
Session Classification: Section E

Track Classification: Section E: QCD and New Physics