

Role of non-abelian anomaly in transition form factors of π^0, η, η' , generalization for the case of any photon virtuality

Monday, 15 April 2019 17:30 (15 minutes)

In the framework of the anomaly sum rules approach, based on the dispersion representation of the axial anomaly and the global quark-hadron duality hypothesis, expressions of Transition Form Factors(TFF) for the pseudoscalar mesons are derived. The obtained solutions are taking into account the mixing between $\pi^0 - \eta - \eta'$ and the gluon anomaly term. Within TFF for $\pi^0 - \eta - \eta'$ estimation of the gluon anomaly contribution is performed for the cases of two real photons and one virtual. Correlations between parameters of the vector and axial channels are observed.

Primary author: Mr KHLEBTSOV, Sergei (ITEP, Moscow)

Co-authors: Mr OGANESIAN, Armen (ITEP, BLTP JINR); TERYAEV, Oleg (JINR); KLOPOT, Yaroslav (BLTP JINR)

Presenter: Mr KHLEBTSOV, Sergei (ITEP, Moscow)

Session Classification: Theoretical Physics

Track Classification: Theoretical Physics