



Contribution ID: 5

Type: **not specified**

On the potential of Light-Cone Sum Rules without Quark-Hadron Duality

Wednesday 19 June 2024 18:00 (20 minutes)

The calculation of local form factors involved in the SM predictions of semileptonic B -meson decays at low- q^2 is a crucial ingredient in the assessment of the B -anomalies.

We revisit their calculation in QCD Light-Cone Sum Rule with B -meson Light-Cone Distribution Amplitudes. In our strategy, we bypass the quark-hadron duality (QHD) approximation which usually contributes an unknown and potentially large systematic error to the prediction of form factors.

We trade this improvement for an increased reliance on higher-order contributions in perturbation theory. Unlike the systematic error from QHD, truncation errors are assessable and systematically improvable, hence allowing robust predictions of form factors.

Primary authors: CARVUNIS, Alexandre (Università di Torino & INFN); MAHMOUDI, Nazila (Lyon University); Mr MONCEAUX, Yann (Université de Lyon - IP2I)

Presenter: CARVUNIS, Alexandre (Università di Torino & INFN)

Session Classification: Day 2