PANIC2021 Conference



Contribution ID: 403

Type: Talk

Effect of the pion field on the distributions of pressure and shear in the proton (NO SHOW UP)

Wednesday 8 September 2021 16:56 (15 minutes)

In the light of recent experimental progress in determining the pressure and shear distributions in the proton, these quantities are calculated in a model with confined quarks supplemented by the pion field required by chiral symmetry. The incorporation of the pion contributions is shown to account for the long-range distributions, in general agreement with the experimentally extracted quark contributions. The results of the model are also compared with lattice QCD results at unphysically large quark mass.

Primary authors: Mr OWA, Shiryo (University of Adelaide); Dr WANG, Xuan-Gong (University of Adelaide); Prof. THOMAS, Anthony (University of Adelaide)

Presenter: Mr OWA, Shiryo (University of Adelaide)

Session Classification: QCD, spin physics and chiral dynamics

Track Classification: QCD, spin physics and chiral dynamics