Contribution ID: 49

Recent Developments in x-dependent Structure Calculations

Friday, 27 July 2018 11:00 (45 minutes)

First principles calculations of the Bjorken-x dependence of hadron structure have been a long-standing challenge for lattice QCD. This year marks a significant milestone: the first determinations of parton distribution functions, which capture the longitudinal momentum structure of fast-moving hadrons, at physical pion masses. Moreover, there has been significant progress in our understanding of the theoretical frameworks underpinning these calculations, although not all sources of systematic uncertainty have been fully explored. I review the various approaches to extracting x-dependent hadron structure from lattice QCD and highlight recent results in both the meson and baryon sectors.

Primary author: Dr MONAHAN, Christopher (University of Washington)

Presenter: Dr MONAHAN, Christopher (University of Washington)

Session Classification: Plenary

Track Classification: Hadron Structure