



Contribution ID: 255

Type: **not specified**

Saturation physics on the energy frontier

Thursday, 6 August 2015 16:40 (20 minutes)

For decades, hadron structure research has progressed toward probing the behavior of constituent quarks and gluons (partons) at smaller and smaller fractions x of their parent hadron's momentum. At sufficiently small x , this behavior is expected to transition to saturation, a condition where parton self-interactions and multiple scatterings become significant.

High-energy proton-ion collisions at RHIC and the LHC provide the best available testing ground for the saturation model. However, producing precise numerical predictions from the model is a complicated task; the state of the art in this area involves next-to-leading order QCD calculations, which are difficult to do numerically. In this talk I'll review recent progress in extracting numerical predictions from saturation models and matching them to experimental results.

Oral or Poster Presentation

Oral

Primary author: ZASLAVSKY, David (Central China Normal University)**Presenter:** ZASLAVSKY, David (Central China Normal University)**Session Classification:** QCD and Heavy Ions**Track Classification:** Heavy Ions