



Contribution ID: 100

Type: not specified

## The search for gluon saturation in pA collisions and at the future Electron Ion Collider

*Friday, 22 September 2017 11:30 (30 minutes)*

In this talk, I plan to discuss the exploration of the gluon saturation phenomenon in pA collisions and at the future EIC. The proposed cutting-edge EIC can lead us to answers to many fundamental questions about the physical role and 3D image of gluons in nucleons and nuclei with unprecedented precision, and also has the potential to discover a form of ultra-dense gluonic matter. Complementary measurements in pA collisions and at the EIC can help us measure various small- $x$  gluon distributions and study the onset of gluon saturation. I will also briefly discuss the recent progress including the measurement of the Wigner gluon distribution at low- $x$ .

**Primary author:** XIAO, Bowen (Central China Normal University)

**Presenter:** XIAO, Bowen (Central China Normal University)

**Session Classification:** Future experiments / Outlook