

## Particle and Hadronic Physics Seminar - IJCLab Pôle Théorie -

« QCD Wigner distributions and gluon tomography at the Electron-Ion Collider »

**Renaud Boussarie**  
(Brookhaven National Laboratory and CFNS)

QCD Wigner distributions provide information on the 5-dimensional parton content of hadrons, as well as their spin content. They are the most general measurable parton distributions, and span all the others. One of the main goals of the future Electron-Ion Collider, now finally approved by the DOE to be built at Brookhaven, is to measure Wigner distributions via so-called gluon tomography. In this talk, I will provide a theoretical overview of the physics of QCD Wigner distributions in the small- $x$  limit and describe state-of-the-art computations and prospects for gluon tomography at the EIC.

**10 March (Tuesday) 11h15**  
**Seminar room, Building 210, Campus d'Orsay**