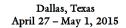
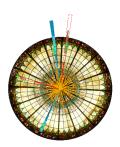
DIS 2015 - XXIII. International Workshop on Deep-Inelastic Scattering and Related Subjects







Contribution ID: 134

Type: not specified

Diffractive production from the Color-Glass-Condensate

Tuesday 28 April 2015 17:05 (25 minutes)

I will discuss that diffractive production at small-x, including diffractive photo production of vector mesons and dijet can be a powerful probe of non-linear gluon-saturation dynamics [1,2]. In particular, I will focus on the diffractive dijet production at HERA and the LHC within the color-glass-condensate approach [2]. I will show that the t-distribution of photoproduction of dijet and vector mesons at large |t| offers a unique opportunity to discriminate among saturation and non-saturation models. I will also show that diffractive dijet correlations at small-x exhibit some non-trivial novel features which are different from the inclusive two-particle correlations, like inclusive dijet, dihadron [3], diphoton [4] and photon-hadron [5] productions. Therefore, diffractive dijet photo-production at the LHC and future colliders provides useful complementary information about the underlying dynamics of particle production in the saturation regime.

- 1: N. Armesto and A. H. Rezaeian, Phys. Rev. D90, 054003 (2014).
- 2: T. Altinoluk, N. Armesto, G. Beuf and A. H. Rezaeian, under final preparation.
- 3: J. L. Albacete and C. Marquet, Phys. Rev. Lett. 105, 162301, (2010).
- 4: A. Kovner and A. H. Rezaeian, Phys. Rev. D 90, 014031 (2014).
- 5: J. Jalilian-Marian and A. H. Rezaeian, Phys. Rev. D86, 034016 (2012).

Author: REZAEIAN, Amir (Universidad Tecnica Federico Santa Maria)

Co-author: ARMESTO PEREZ, Nestor (Universidade de Santiago de Compostela (ES))

Presenter: REZAEIAN, Amir (Universidad Tecnica Federico Santa Maria)Session Classification: WG2 Small-x, Diffraction and Vector Mesons

Track Classification: WG2 Small-x, Diffraction and Vector Mesons