

Contribution ID: 470 Type: Parallel Session Talk

## **Refining Geometrical Scaling**

Thursday, 22 July 2010 15:25 (16 minutes)

We consider and compare various geometric-scaling solutions of the QCD Balitsky-Kovchegov (BK) equation, for fixed or running QCD coupling.

These solutions predict different scaling variables which we first test with recent DIS cross-section data using the "Quality Factor" method. Then we use a chi^2 method to compare the different predicted parametrisations of the traveling wave representation of the BK equation's solutions. A geometric scaling corresponding to running coupling is finally favored, with a satisfactory chi^2 by d.o.f.. There is no indication of a sizeable scaling violation term.

Primary author: PESCHANSKI, Robi (IPhT, CEA-Saclay)

Co-author: ROYON, christophe (IRFU, CEA-Saxclay)

Presenter: PESCHANSKI, Robi (IPhT, CEA-Saclay)

Session Classification: 08 - Heavy Ion Collisions and Soft Physics at Hadron Colliders

Track Classification: 08 - Heavy Ion Collisions and Soft Physics at Hadron Colliders