



BK Equation and Traveling Wave Solutions

<http://www.firstlight.cn> 2007-06-30

It has been shown that the transition to the saturation regime of high energy QCD is similar to the formation of the front of a traveling wave. In particular, it can be verified that Balitsky-Kovchegov (BK) evolution equation reduces, after some approximations, to the nonlinear Fisher and Kolmogorov-Petrovsky-Piscounov (FKPP) equation, well-known from statistical physics. In these proceedings, based on the current knowledge of the

asymptotic solutions of the BK equation, we propose a parametrization for the forward scattering amplitude which interpolates between the traveling wave solution and the saturation region.

[存档文本](#)