Abstract Submitted for the HAW05 Meeting of The American Physical Society

Proton-Nucleus Scattering in the Color Glass Condensate KAZUNORI ITAKURA, Institute of Particle and Nuclear Studies, KEK — We present an alternative description of the proton-nucleus collision within the framework of the Color Glass Condensate (CGC). This is based on the eikonal approximation for three valence quarks in a projectile proton which propagate in the strong gauge field created by the target nucleus treated as the CGC. The similar construction was recently done for the C-odd Odderon exchange. This description directly allows us to compute the evolution of the scattering amplitude between a 3-quark state and the CGC. We show the evolution equations in the weak and strong field regimes, and discuss the effects of gluon saturation.

Kazunori Itakura Institute of Particle and Nuclear Studies, KEK

Date submitted: 23 May 2005 Electronic form version 1.4