

A New Effect in the QCD Fusion of Nuclear Partons

RUAN Jian-Hong,^{1,2} ZHU Wei¹ and LI Guang-Lie^{2,3}

¹ Department of Physics, East China Normal University, Shanghai 200062, China

² Institute of High Energy Physics, The Chinese Academy of Sciences, Beijing 100039, China

³ Center of Theoretical Nuclear Physics, National Laboratory of Heavy Ion Accelerator, Lanzhou 730000, China

(Received: 2000-8-21; Revised: 2001-5-13)

Abstract: The parton fusion in nucleus at the leading order of recombination is investigated based on perturbative QCD. We compute various cut diagrams including the nuclear parton fusion, and find that the parton-fusion effects depend on the nuclear QCD structure.

PACS: 13.60.Hb, 12.38.Bx

Key words: parton fusion, nuclear effects

[\[Full text: PDF\]](#)

Close