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## **CGC+HIJING, a new Monte-Carlo model for heavy ion collisions**

In high energy hadronic collisions, non-linear effects in QCD becomes important due to high parton density at small- $x$  which is formulated by the framework of Color Glass Glass Condensate (CGC). We have developed a new Monte-Carlo event generator by implementing CGC framework into HIJING. This is the first attempt to implement CGC into full event generator on market. Therefore, our simulation includes particle productions by pQCD hard process, CGC, and soft interaction. Partons produced from these processes are fragmented into hadrons within LUND string model. In this talk, some detail description of this newly developed model will be presented, and our results for heavy ion collisions will be discussed. We demonstrate this CGC+HIJING model in pp, pA, AA collisions at RHIC and LHC energies, and also apply for the pA collisions at cosmic ray energies. Our model provides a novel hadronic interaction model useful for air shower simulation code of Ultra High Energy Cosmic Rays.

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