Fourth Annual Large Hadron Collider Physics Conference 2016



Contribution ID: 235

Type: Talk

nCTEQ15 nuclear parton distributions with uncertainties

We present the first official release of the nCTEQ nuclear parton distribution functions (nPDFs) with errors. The main addition to the previous nCTEQ PDFs is the introduction of PDF uncertainties based on the Hessian method. Another important improvement is the inclusion of pion production data from RHIC giving us a handle to constrain gluon PDF. In this presentation we briefly discuss the framework of our analysis and concentrate on the comparison of our results with those of other groups providing nPDFs. Additionally we present predictions for selected results from the LHC heavy ion collisions.

Authors: KUSINA, Aleksander (LPSC Grenoble); CLARK, Benjamin; KEPPEL, Cynthia (Jefferson Lab); Dr LYONNET, Florian (SMU); OLNESS, Fred (Southern Methodist University); SCHIENBEIN, Ingo (Universite Joseph Fourier); MORFIN, Jorge G. (Fermilab); OWENS, Joseph (Florida State University); KOVARIK, Karol; JEZO, Tomas (Milano Bicocca)

Presenter: JEZO, Tomas (Milano Bicocca)

Session Classification: Heavy Ion

Track Classification: Physics of Heavy Ion collisions