Service de Physique Nucléaire

Séminaire

le vendredi 16 mars 2012 à 10h30

Attention : début du séminaire avancé de 30 min

CEA Saclay, Orme des Merisiers, Bât. 703, Salle 135

Quark- and Gluon-Spin Structure of the Proton from High Energy Polarized Proton-Proton Collisions at RHIC

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The Relativistic Heavy Ion Collider (RHIC) at Brookhaven National Laboratory collides polarized proton beams at center of mass energies reaching up to 500 GeV. Measurements of double spin asymmetries in inclusive hadron-, jet- and direct photon-production have placed constraints on the gluon spin distribution in the proton. Measurements of parity violating single spin asymmetries in W-production currently in progress will determine the quark and anti-quark spin distributions separately for each flavor.
In this seminar, a review of RHIC results on the gluon spin contribution to the proton spin will be given. Future efforts to extend the reach of the present results to lower x will be discussed. Detector upgrades in STAR and PHENIX make it possible to carry out measurements with W-bosons at RHIC. The status of the detector upgrades will be presented and first results from W-production at RHIC will be presented.

Le café sera servi 10 minutes avant

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