

**2002 CONGRESS – TUESDAY SESSION TU-P6
CONGRÈS 2002 - RÉSUMÉS DE SESSION TU-P6 (Mardi)**

[TU-P6]**HADRONIC PHYSICS /
PHYSIQUE HADRONIQUE****TUESDAY, JUNE 4
MARDI LE 4 JUIN****ROOM / SALLE 2004 D****Chair: P. Savard, Univ. of Toronto****TU-P6-1 14h15****SAMPA BHADRA**, Department of Physics and Astronomy, York University*QCD at HERA: The ZEUS Experiment*

HERA is an electron proton collider that allows us to probe the complex structure of the proton to the smallest values of x , the fractional momentum carried by the struck parton in the proton, and the highest Q^2 , the virtuality of the exchanged photon. In addition, the real photon can also be studied in photoproduced events at HERA, at the largest center-of-mass energies available to date. The ZEUS experiment explores many facets of QCD, via the interaction of real and virtual photons with protons.

TU-P6-2 14h45

Recent Charm Physics Results from ZEUS, **S. Menary**, Department of Physics and Astronomy, York University – I will review recent results from ZEUS on the production of charmed mesons.

15h00 Coffee Break / Pause café**TU-P6-3 15h30**

Charmonium Physics at BaBar, **Christopher Hearty**, University of British Columbia – This talk will present recent results from BaBar on the inclusive production of charmonium ($c\bar{c}$) mesons. The first topic will be the previously unobserved production of J/ψ mesons in e^+e^- annihilation (as opposed to B decay), and its interpretation in non-relativistic QCD and the colour singlet model. The second topic will be the production of J/ψ , $\psi(2S)$, $C1$ and $\bar{C}1$ mesons in B decays. Results will include rates and helicity and momentum distributions and their interpretation in terms of possible new physics.

TU-P6-4 15h45**JUERGEN WENDLAND**, Simon Fraser University*HERMES Measurements of the Nucleon Spin Structure*

Since 1995 the HERMES collaboration has collected inclusive and semi-inclusive deep inelastic scattering data of polarized leptons from longitudinally polarized ^3He (1995), H (1996/1997), and D (1998-2000) targets. Measurements of inclusive double-spin asymmetries have allowed for a precise determination of the spin structure functions g_1 in the range $0.0021 < x < 0.85$ and $Q^2 > 0.1, \text{mathrm{GeV}^2}$. In semi-inclusive deep inelastic scattering the flavour of the struck quark is related to the flavour content of the final state hadron through fragmentation functions. In leading order QCD the inclusive and semi-inclusive asymmetries may be employed to compute the quark polarisations. The HERMES collaboration has carried out first measurements of single-spin azimuthal asymmetries in hard exclusive electro-production of real photons (DVCS) and $\pi^+\pi^+$ mesons. Both results can be interpreted in terms of the recently developed generalized parton distribution functions. Recent HERMES results on the spin structure of the nucleon will be presented.

16h15 Session Ends / Fin de la session