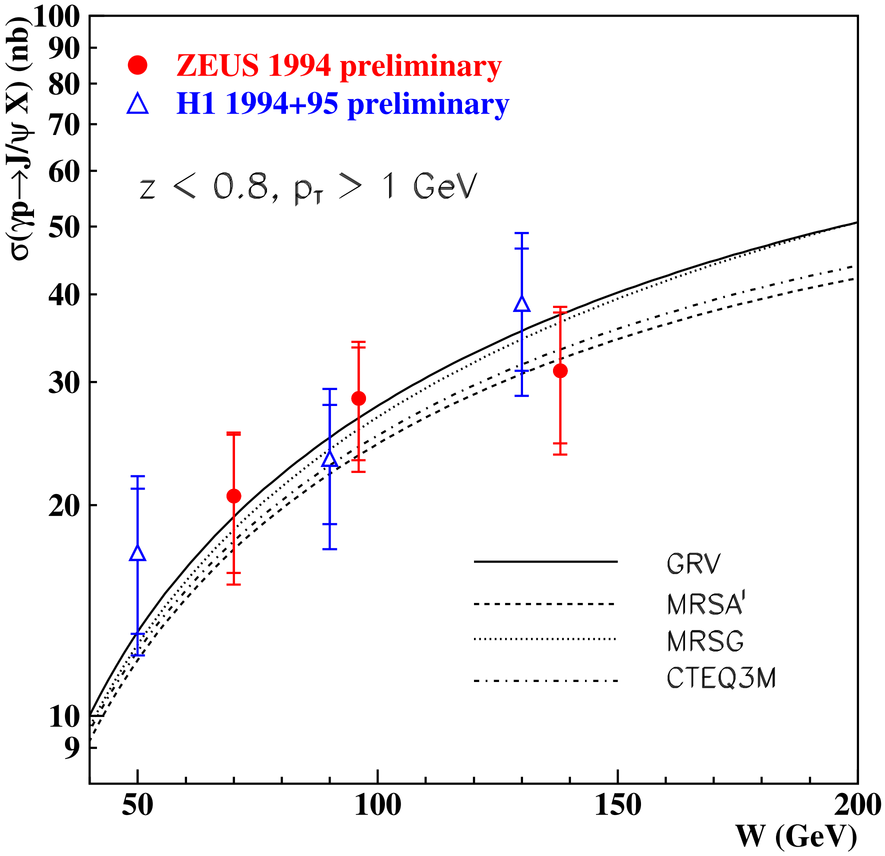
Inelastic J/ψ Production – $\sigma_{\gamma p}(W_{\gamma p})$

Kinematic range : $z < 0.8$ $p_t^2(J/\psi) > 1\,\mathrm{GeV}^2$



- rise of cross section with increasing $W_{\gamma p}$, related to rise of gluon density $g(x)$ towards small x
- good agreement between data and NLO pQCD calculation (for $m_c = 1.4\,\mathrm{GeV}$, $\mu = \sqrt{2}m_c$, $\Lambda_{QCD} = 0.4$), using PDF's extracted from F_2 scaling violations, *i.e.* steep gluon
- kinematic cuts reduce sensitivity to $g(x)$ at small x
- direct measurement of $g(x)$ needs NLO calculation differential in x_g