Study of Scaling Properties of Vector-Meson Photoproduction at High Momentum Transfer

☞ Plots of talk on 20 July updated for Osaka results

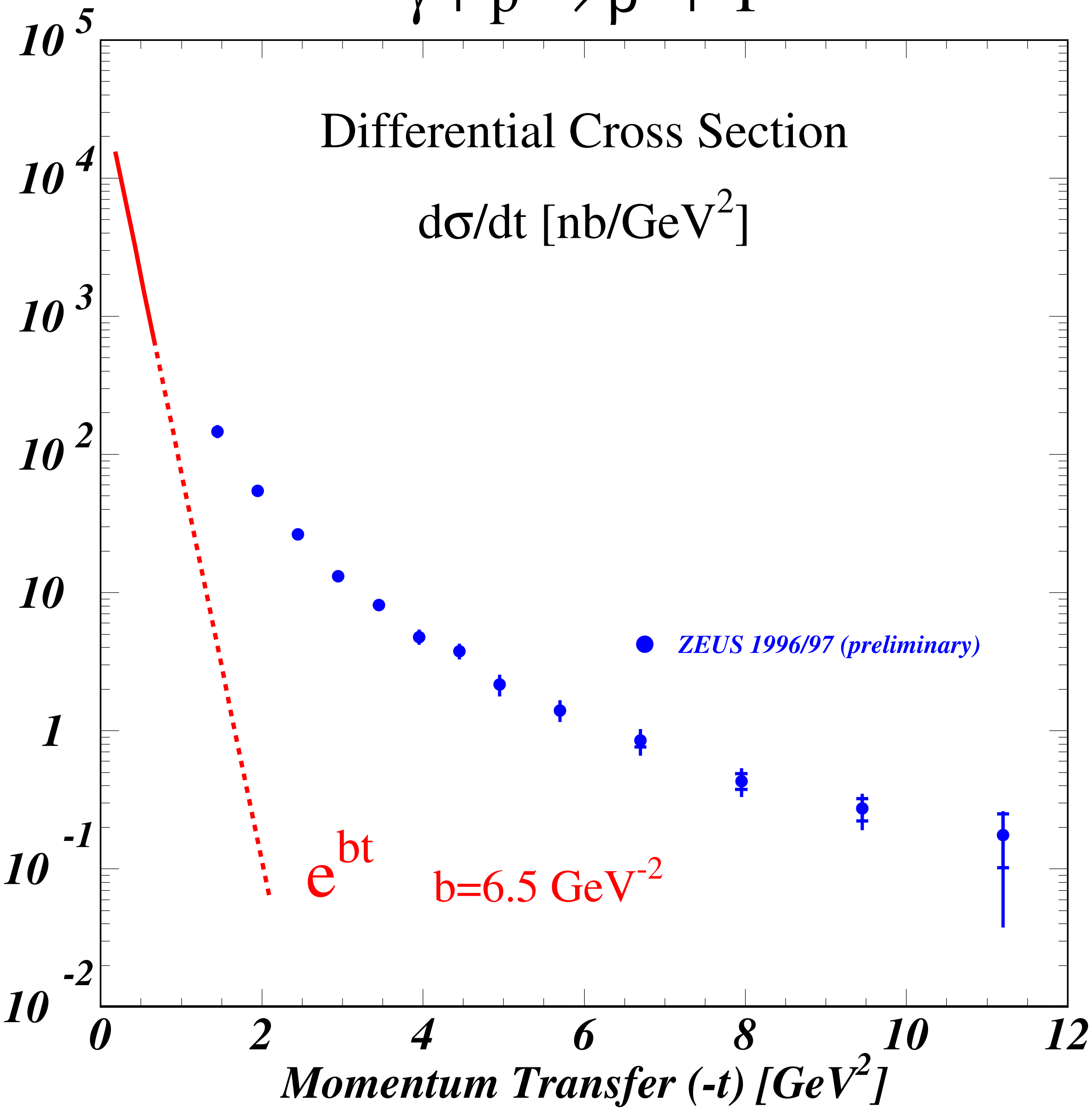
(See also APS proceedings: hep-ex/0010079)

☞ Some remarks on the nowe results of Kasia (Minutes of October 18)

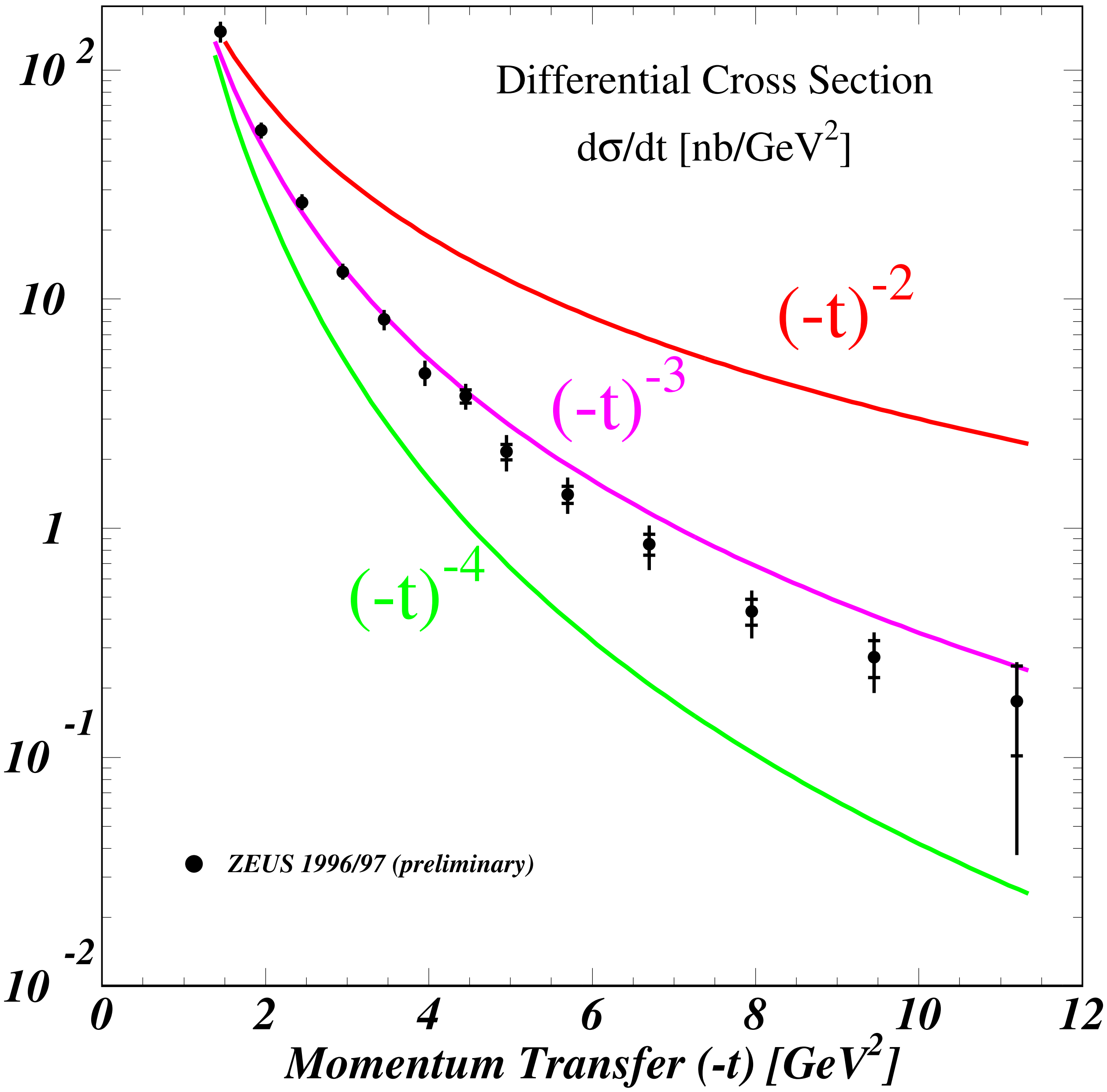
J. A. Crittenden

DESY

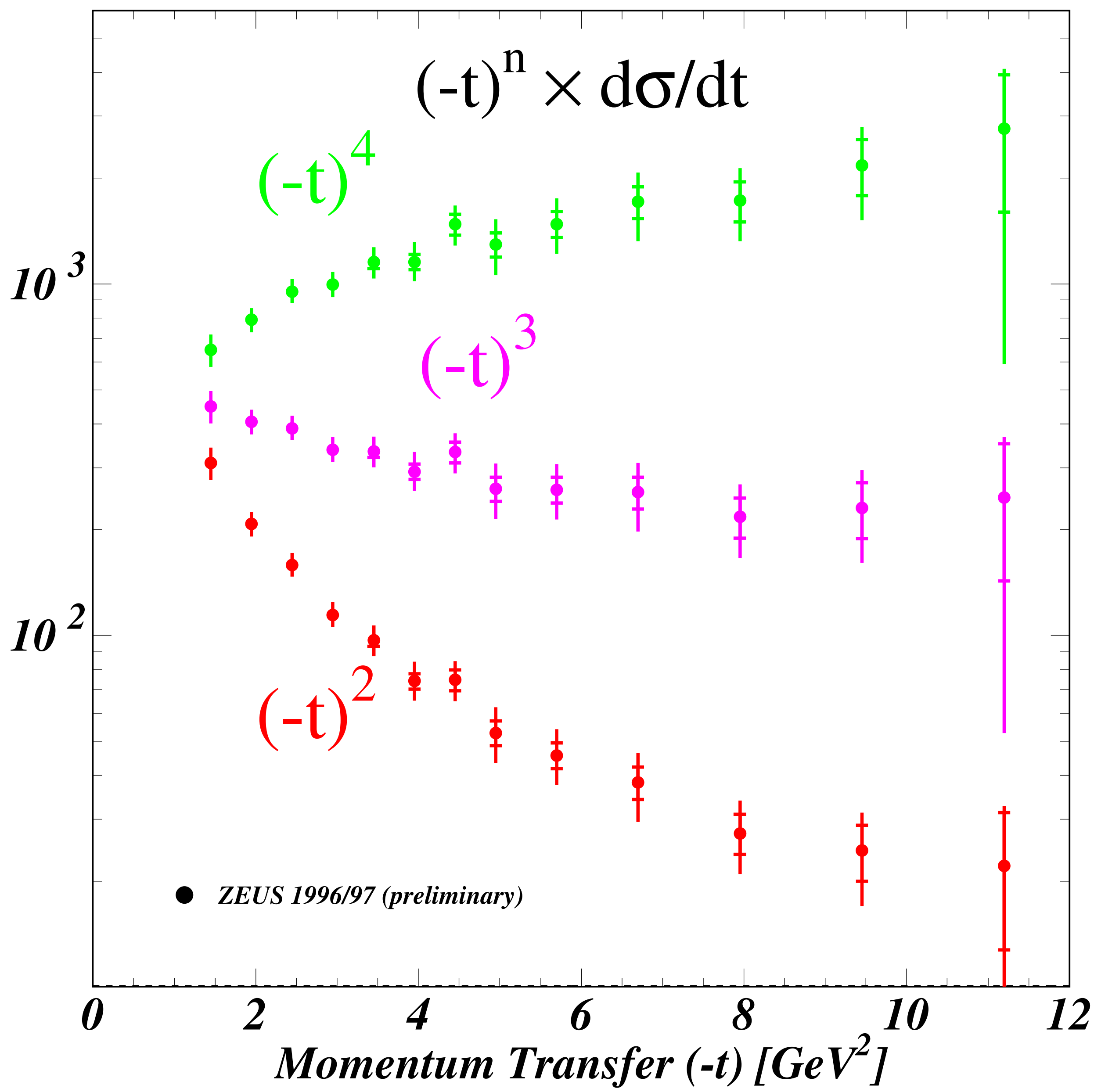
$$\gamma + p \to \rho^0 + Y$$



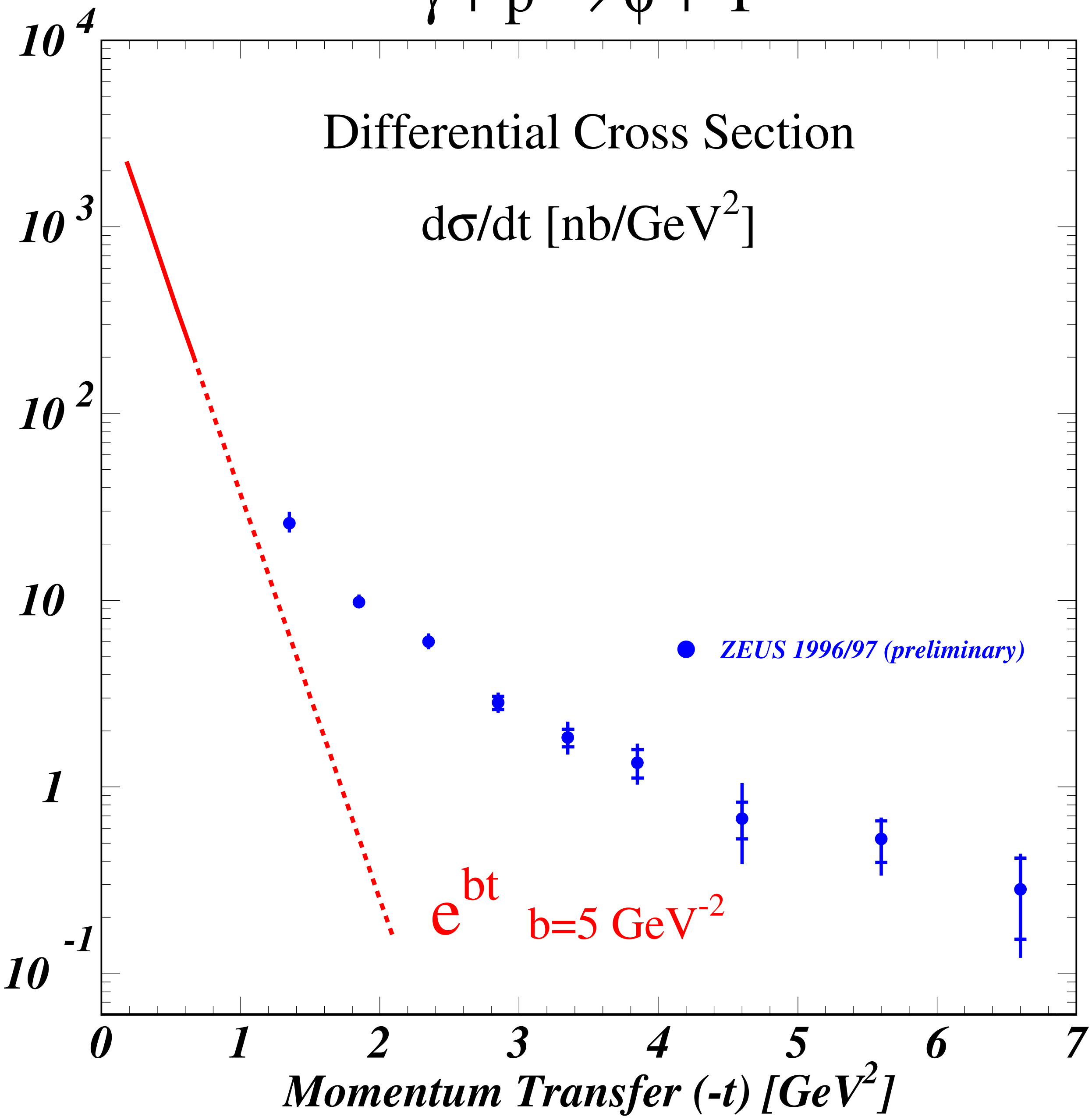
$\gamma + p \rightarrow \rho^0 + Y$



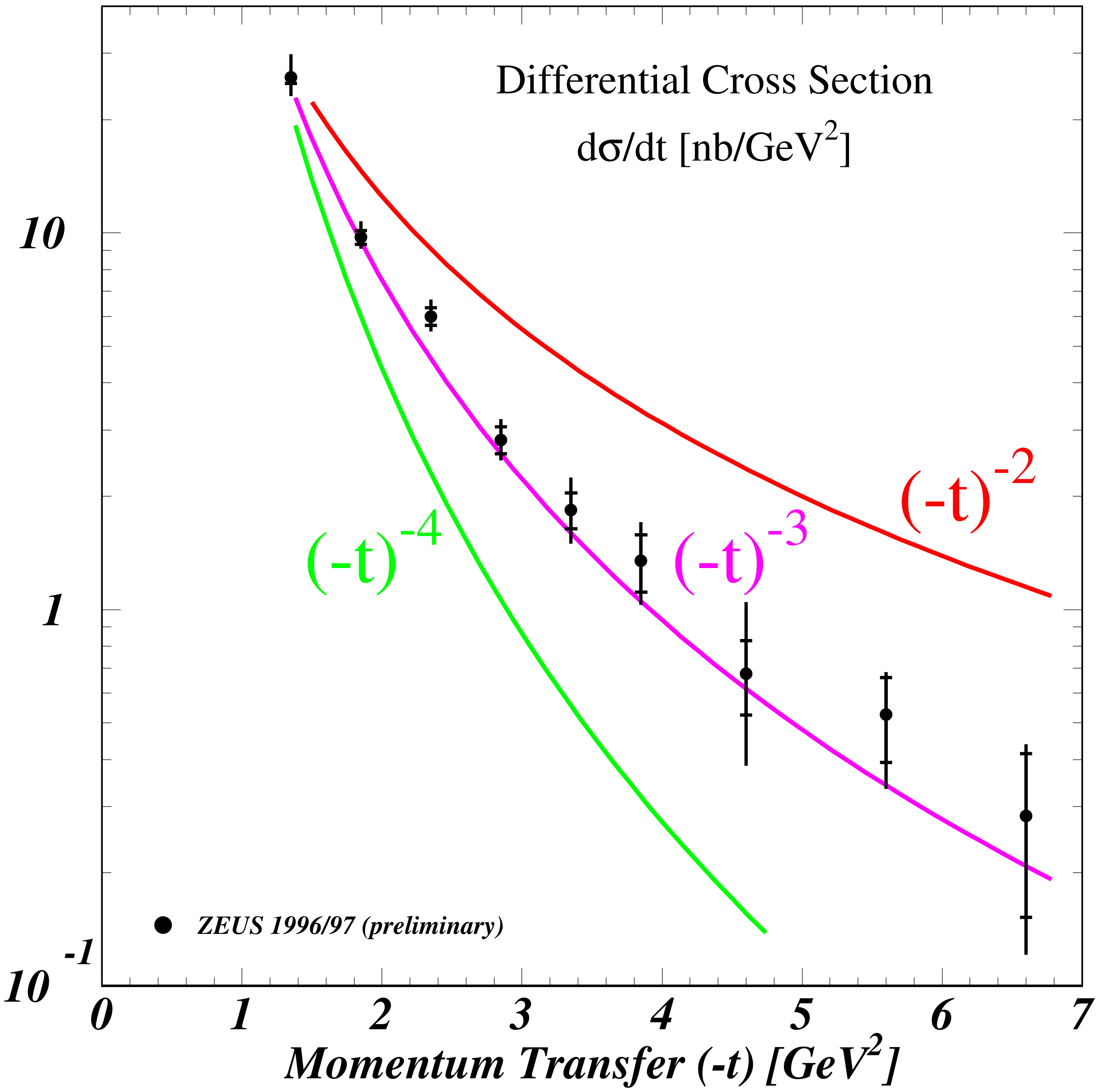
$\gamma + p \rightarrow \rho^0 + Y$

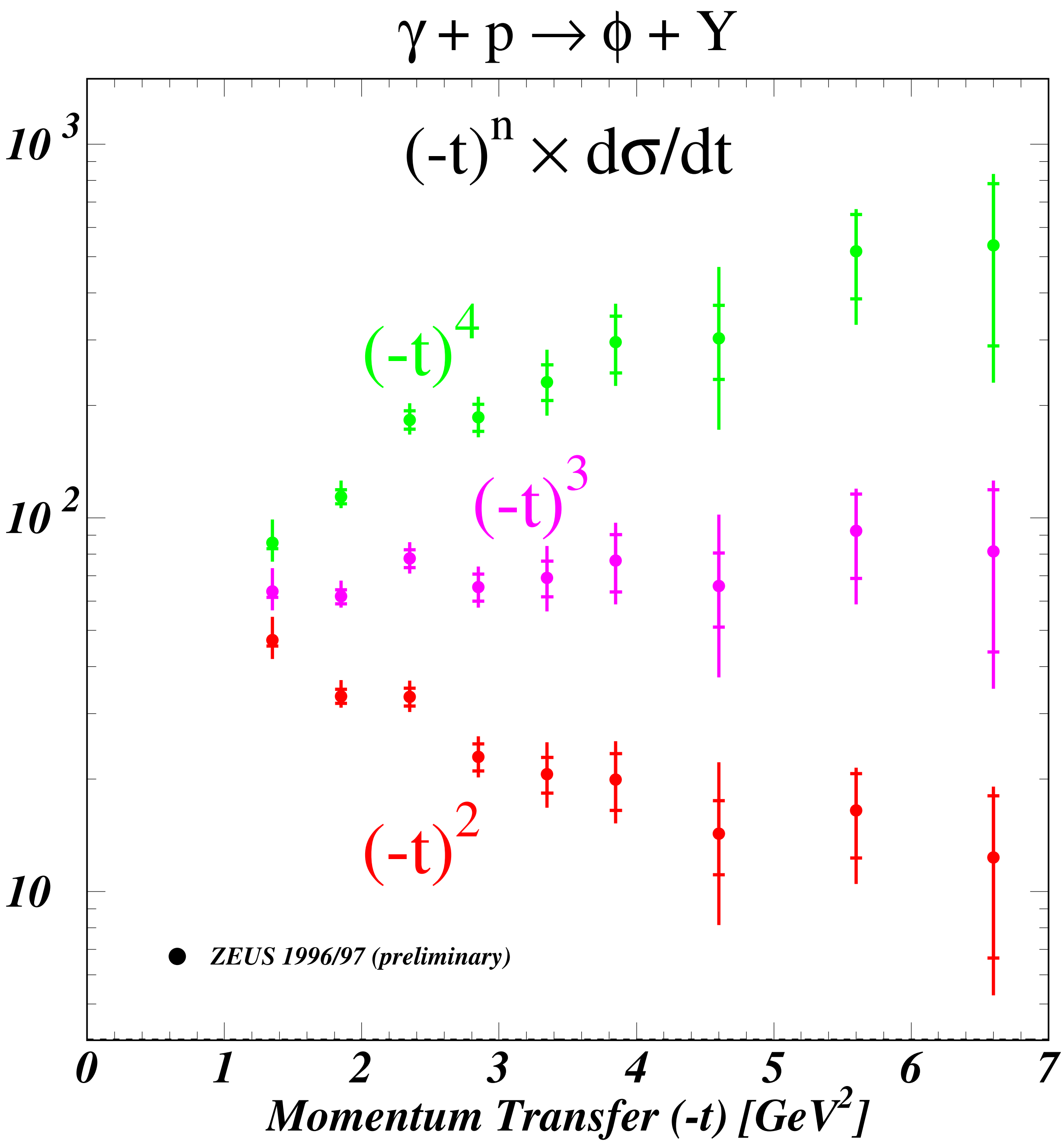


$\gamma + p \rightarrow \phi + Y$



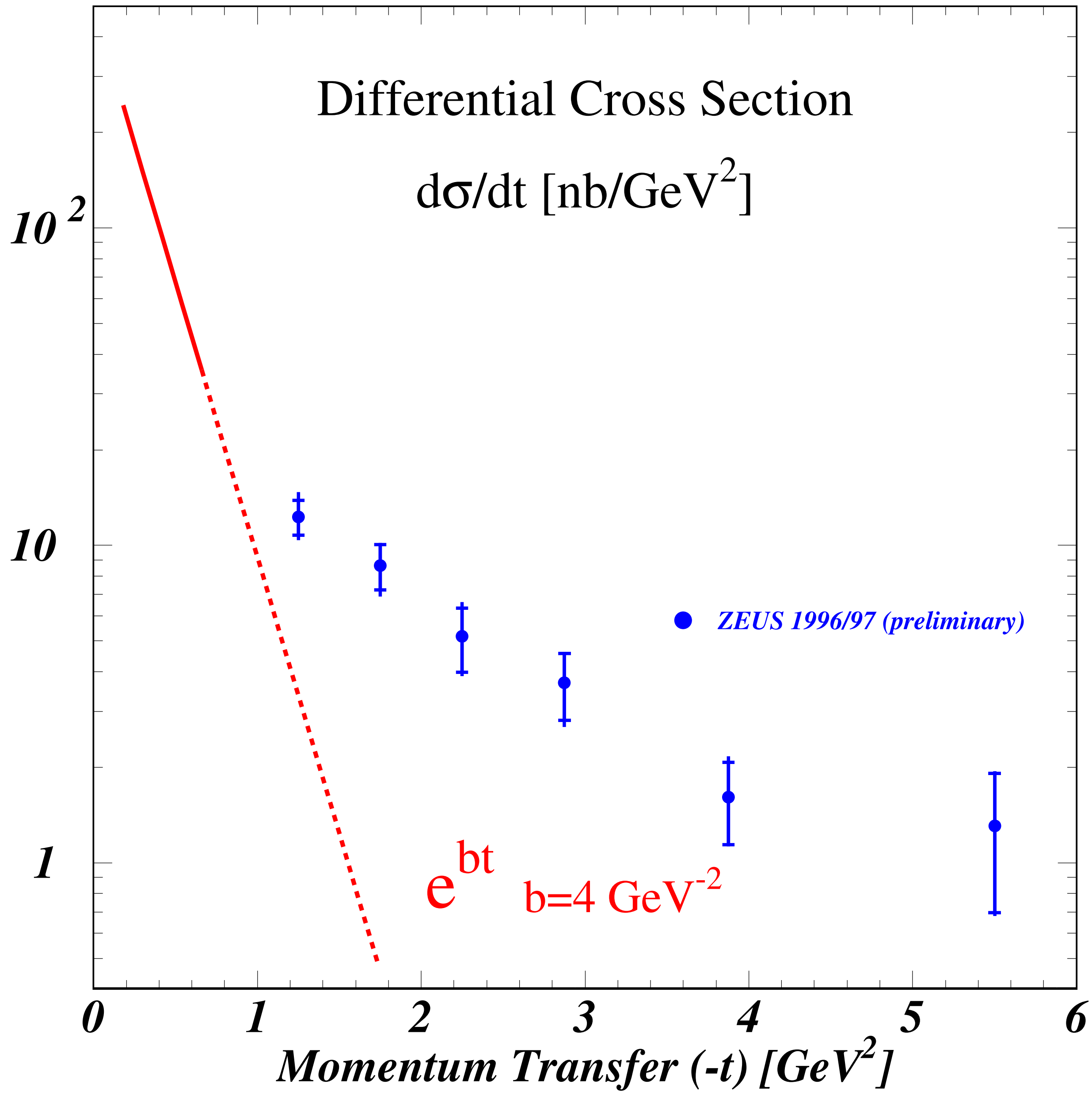
$\gamma + p \rightarrow \phi + Y$



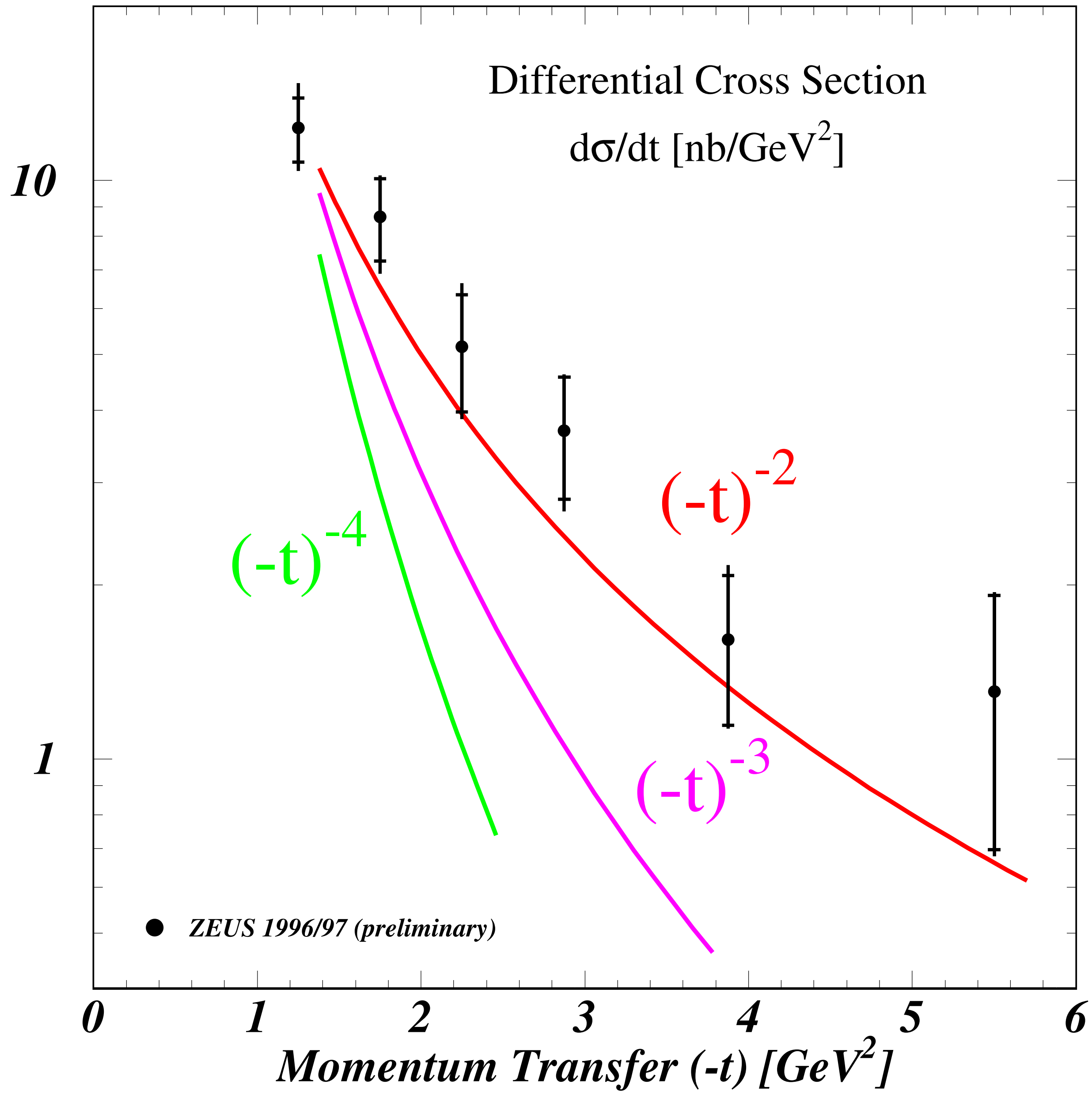


γ + p → φ + Y
(-t)^n × dσ/dt
(-t)^4
(-t)^3
(-t)^2
10^3
10^2
10
ZEUS 1996/97 (preliminary)
0
1
2
3
4
5
6
7
Momentum Transfer (-t) [GeV^2]

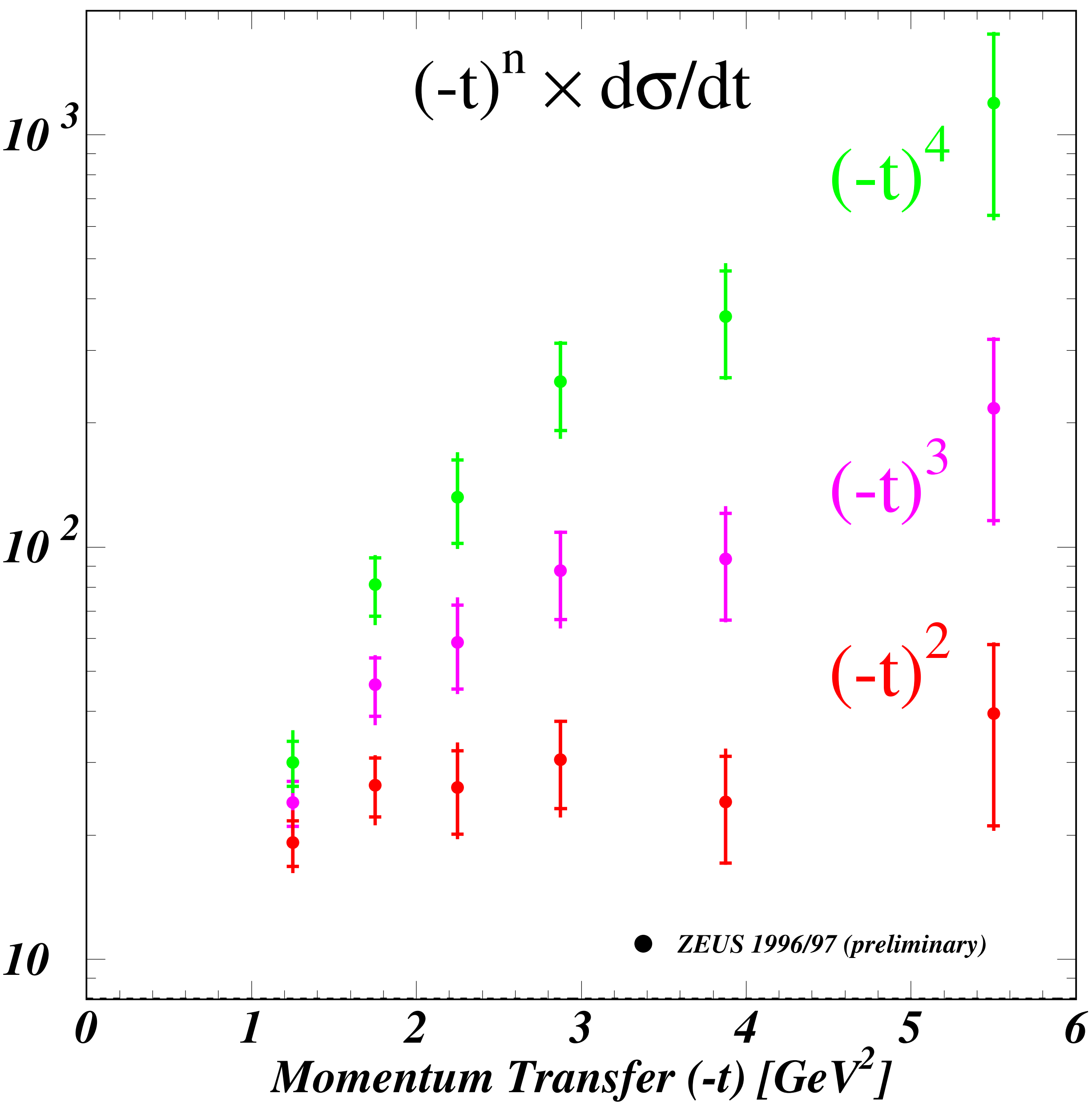
$\gamma + p \rightarrow J/\psi + Y$



$\gamma + p \rightarrow J/\psi + Y$



$\gamma + p \rightarrow J/\psi + Y$



Remarks on new analysis which was presented on 18 October

☞ The new analysis restricts the data to a smaller region in M_Y
$\Longrightarrow$ Physics changes

$\rightarrow$ t dependence steeper
$\rightarrow$ ϕ-to-ρ^0 comparison very interesting

Decision necessary here

☞ The M_Y region is again different for the comparison to the Ivanov calculation

The effective power of 4.17 for the ρ^0 should not be compared to the 3.3 of the Osaka paper