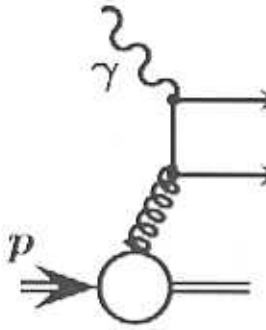
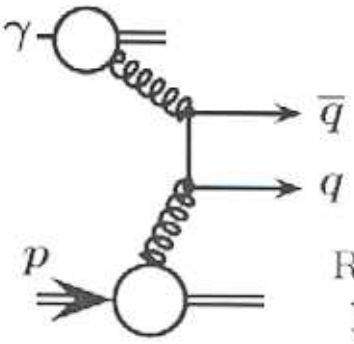
PHOTOPRODUCTION ($Q^2 \approx 0$)

J. BUTTERWORTH, N. GOODMAN, M. STRATMANN, W. VOGELSANG

HIGH-p_T JET/HADRON PRODUCTION:



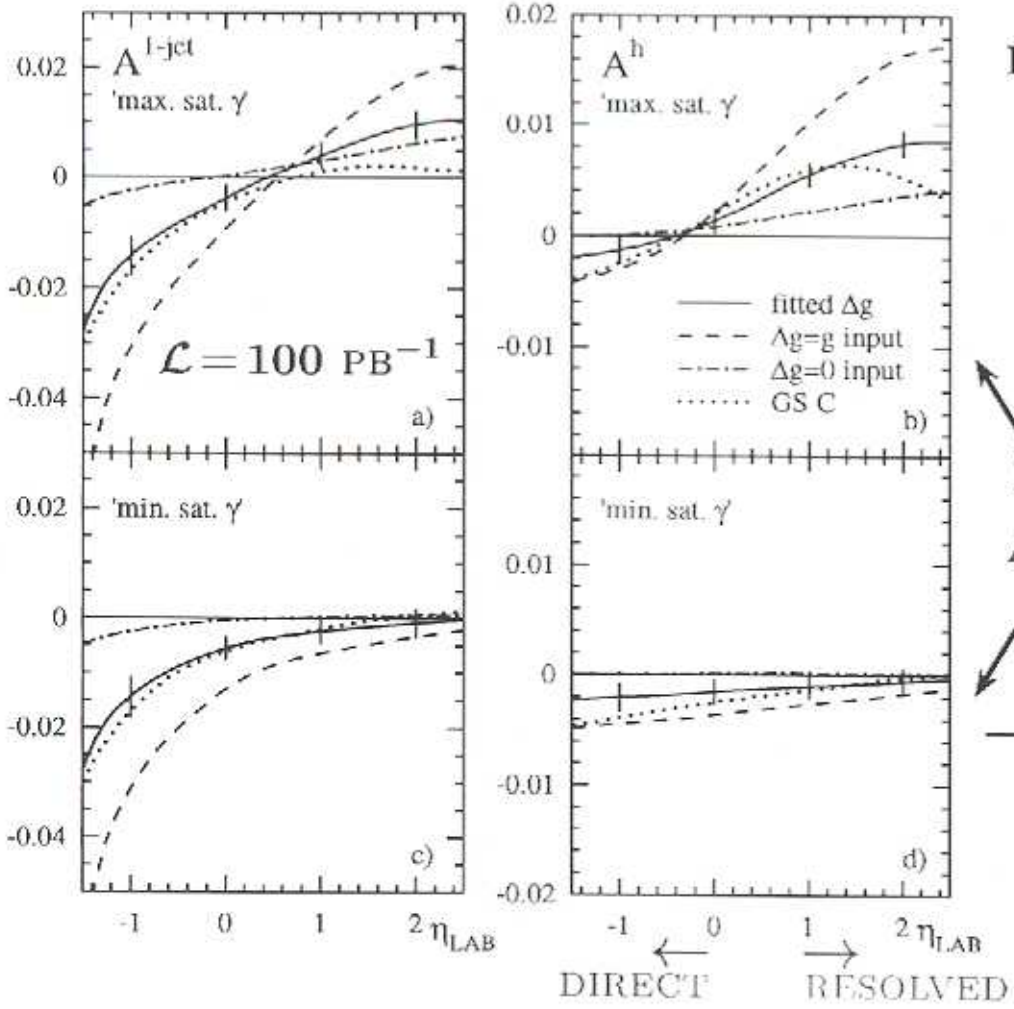
DIRECT PHOTON



RESOLVED PHOTON ($\vec{\gamma}\vec{p}$)

↳ Δq^γ

INCLUSIVE ASYMMETRIES FOR SINGLE JETS: $p_T > 8$ GeV HADRONS: $p_T > 2$ GeV



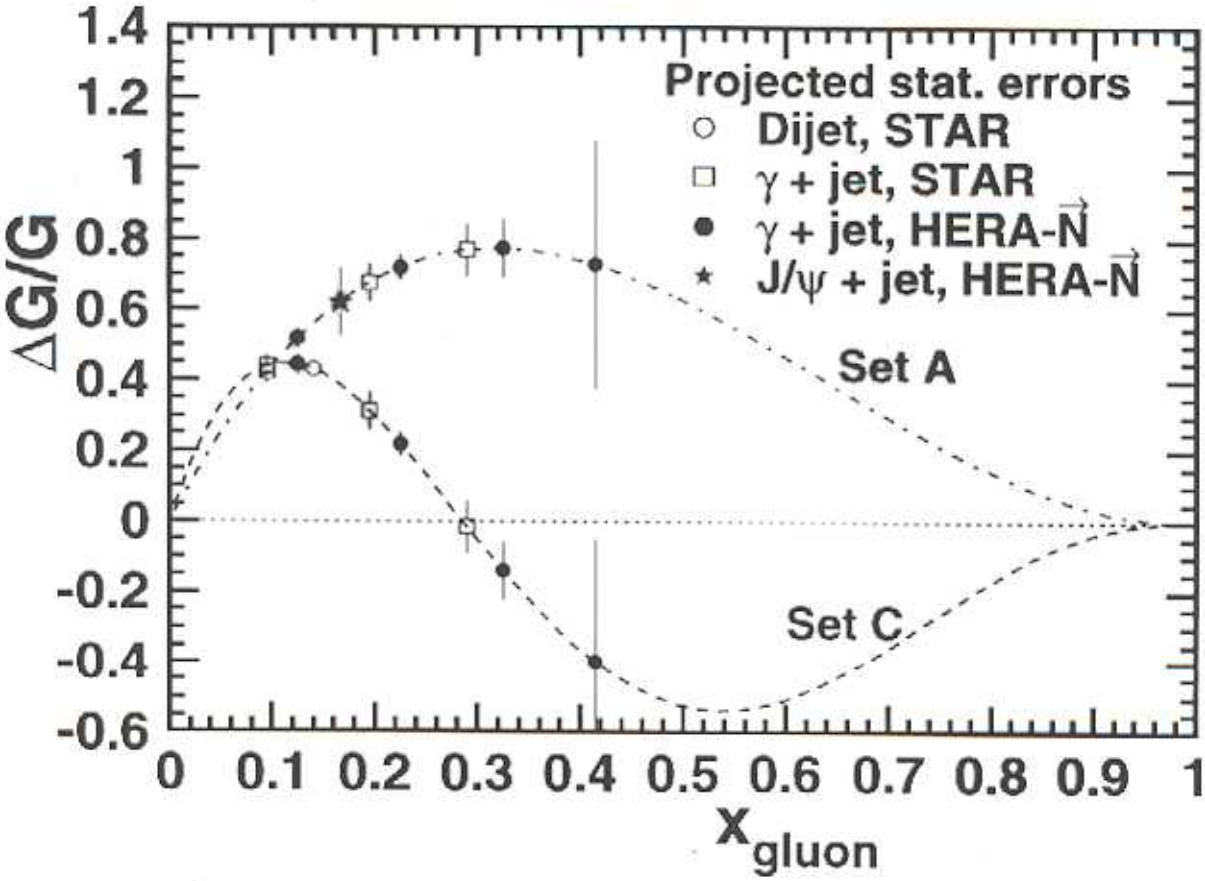
INFORMATION ON Δq^γ UNIQUE TO HERA

2 DIFFERENT ASSUMPTIONS FOR Δq^γ

→ SENSITIVITY TO Δq^γ AND ΔG

$\Delta G/G$ AT HERA-$\vec{N}$

$$\vec{p}\vec{p} \to \gamma + \text{JET} + X, \quad \vec{p}\vec{p} \to J/\Psi + \text{JET} + X$$



HERA-$\vec{N}$	2	4	6	8
RHIC	10	20	30	

$\longrightarrow p_T$

STUDY $\Delta G/G$ IN

pQCD ONSET REGION

DEEP PERTURB. REGION

COMPLEMENTARY EXPERIMENTS!

(V. KOROTKOV)