

# c) $\sin 2\varphi$ ASYMMETRY IN LONGIT. POLARIZED SIDIS

$$e \vec{p} \rightarrow e' \pi X$$

$$p_{\text{lab}} = 6 \text{ GeV}$$

$$Q^2 = 1.5 - 3 \text{ GeV}^2$$

CLAS: H. Avakian et al.: AIP Conf. Proc. 792 (2005) 945

$$\sin 2\varphi \text{ ASYMM.} \propto h_{1L}^+ \otimes H_1^+ \frac{q_1^2}{Q^2}$$

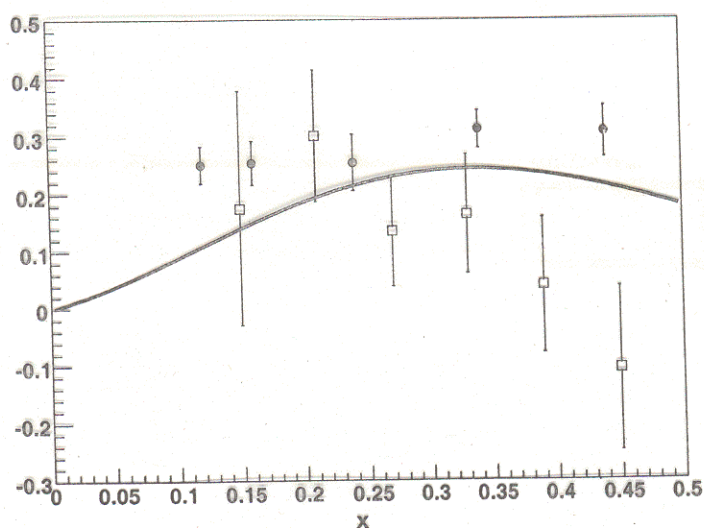
$H_1^+$  PARAMETR.: A.V. Efremov et al.: Phys. Rev. D 77 (2003) 111001

$$\text{ASSUMED } h_{1L}^+(x, \vec{p}_1^2) = h_{1L}^+(x, 0) \exp(-\vec{p}_1^2/\Delta^2)$$

$$\text{EXTRACTED } \tilde{h}_{1L}^{1u}(x) = \pi \langle \vec{p}_1^2 \rangle h_{1L}^{1u}(x, 0)$$

$$\text{CONV. FACT. } C = \frac{2M}{Q^2}$$

COMPARED WITH  $g_1^u(x) \rightarrow \text{HERMES: P.R.D. } \underline{71} \text{ (2005)}$   
012003



$$\square -\tilde{h}_{1L}^{1u}$$

CLAS

$$\bullet g_1^u$$

HERMES

$$\text{— GRSV2000}$$

GRSV2000

PHYS. REV. D 63 (2001)

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$$h_{1L}^+ = -g_{1L}$$