Collins

$$\sigma \sim \sin(\varphi + \varphi_s)$$

$$A_{UT}^{\sin(\varphi+\varphi_s)} \sim S_\perp \sum_{a,\bar{a}} e_a^2 \, x \, h_1^a(x) \cdot H_1^{\perp a}(z)$$

Distribution of quarks with spin paralell
parallel to the transverse spin of the nucl

$\pi^+ \Longrightarrow$ $$A_{UT}^{\sin(\varphi+\varphi_s)} \to \frac{h_1^u(x) H_1^{\perp (1/2) u \to \pi^+}(z)}{f_1^u(x) D_1^{u \to \pi^+}(z)}$$