

$$= 2 \int d^2 \vec{r}_T d^2 \vec{b}_T \int_0^1 dz \left| \psi_{\lambda}^{\gamma*}(\vec{r}_T, Q^2, z) \right|^2 \left[1 - S_x^{(2)} \left(\vec{b}_T + \frac{\vec{r}_T}{2}, \vec{b}_T - \frac{\vec{r}_T}{2} \right) \right]$$