$$S^2(p_{1t}, p_{2t}, \theta) = \frac{(\frac{\partial^2 \sigma_{gap}}{\partial p_{1t} \partial p_{2t}})}{(\frac{\partial^2 \sigma}{\partial p_{1t} \partial p_{2t}})}$$

$$(\frac{\partial^2 \sigma_{gap}}{\partial p_{1t} \partial p_{2t}}) \simeq \int T(b'') e^{i \overrightarrow{b''} \overrightarrow{q_{2t}}} T(b') e^{i \overrightarrow{b'} \overrightarrow{q_{1t}}} e^{-\Omega(b)/2} e^{i \overrightarrow{b} \overrightarrow{k_t}} d^2 b' d^2 b'' d^2 b \frac{d^2 k_t}{4\pi^2}$$

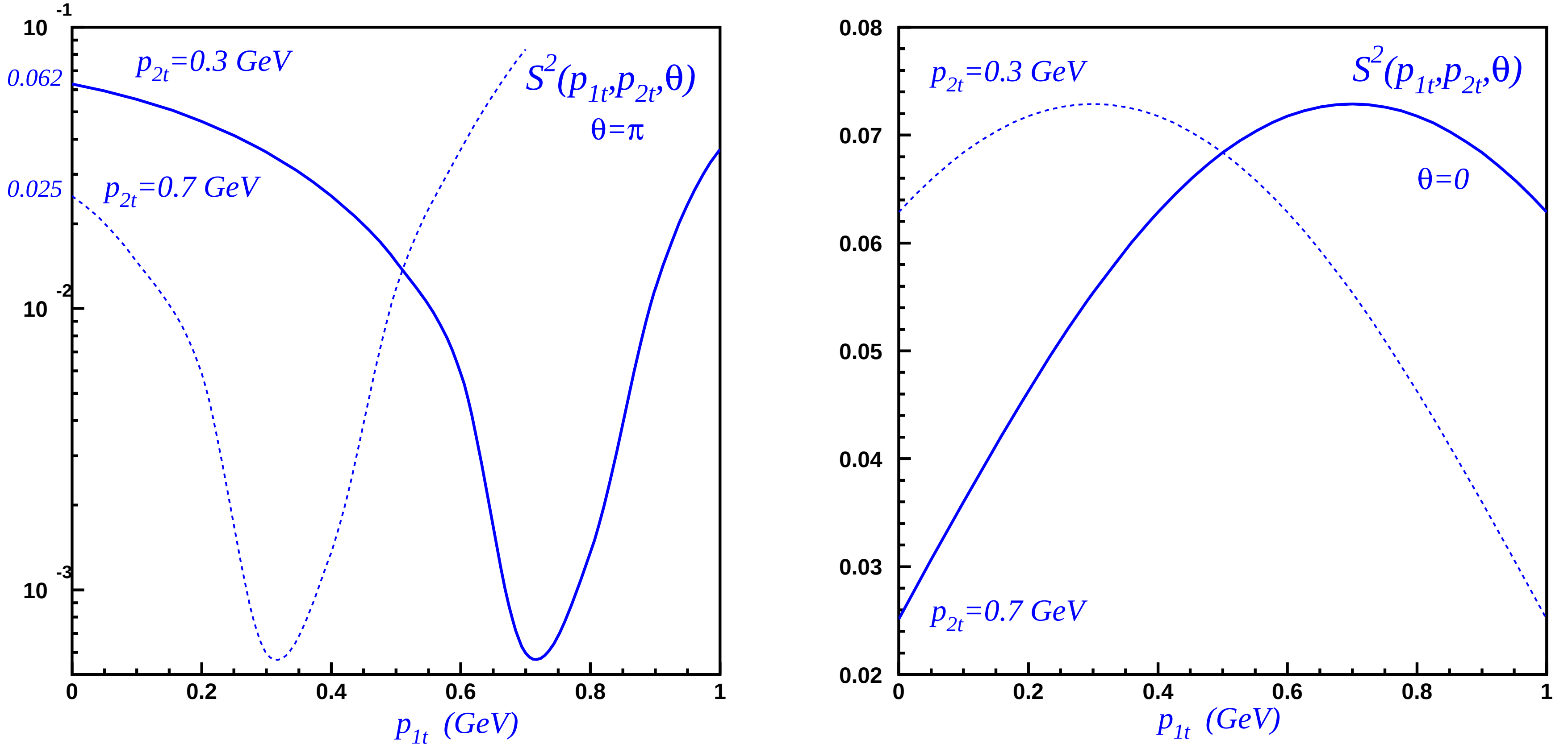
where

$$\overrightarrow{q_{1t}} = \overrightarrow{k_t} + \overrightarrow{p_{1t}} \qquad \overrightarrow{q_{2t}} = \overrightarrow{k_t} - \overrightarrow{p_{2t}}$$

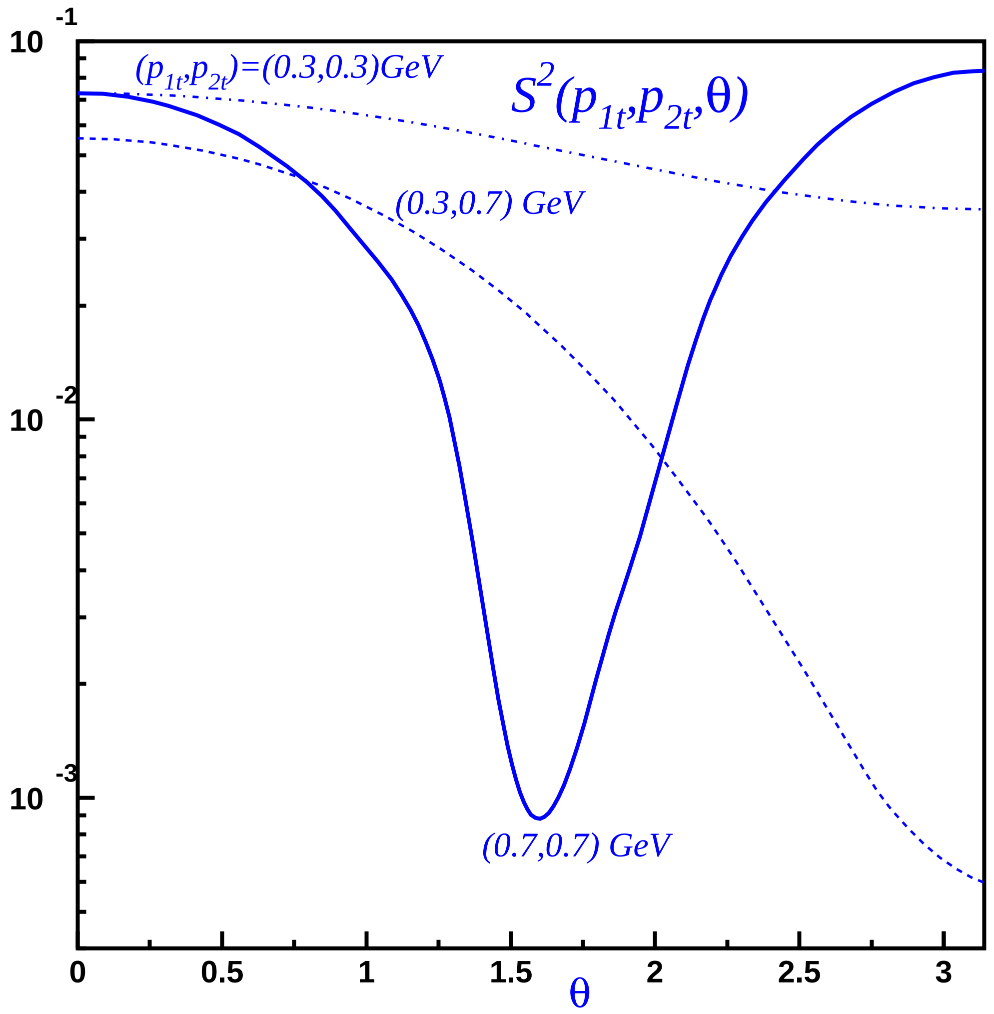
$$\Omega(b) = \frac{\sigma_0}{\pi R^2} (\frac{S}{S_0})^{\Delta} e^{-\frac{b^2}{R^2}}$$

$$e^{-\Omega(b)/2} \simeq 1 - \Omega(b)/2$$

In this expansion our approach is consistent with Khoze, Martin and Ryskin (2002).



$$S^2(p_{1t}, p_{2t}, \theta) = [1 - 0.73exp(0.29|\overrightarrow{p_{1t}} - \overrightarrow{p_{2t}}|^2)]^2$$



10^{-1}
10^{-2}
10^{-3}
$(p_{1t},p_{2t})=(0.3,0.3)$GeV
$S^2(p_{1t},p_{2t},\theta)$
(0.3,0.7) GeV
(0.7,0.7) GeV
0
0.5
1
1.5
2
2.5
3
θ