LHCb
\( \sqrt{s} = 7 \text{ TeV} \)
\( 2.0 < y < 4.5 \)

The figure shows the differential cross section \( \frac{d\sigma}{dp_T} \) in nb/(GeV/c) as a function of \( p_T \) (GeV/c) for prompt \( \psi(2S) \) production with \( 2.0 < y < 4.5 \). The data points are overlaid with a theoretical prediction using NRQCD.