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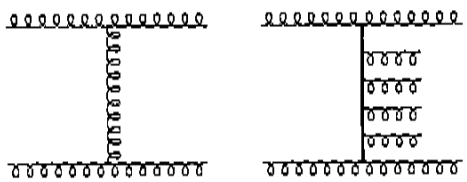

Fig. 1: Two jet production amplitude in the large-$y$ limit at (a) the Born level and (b) with minijet corrections.

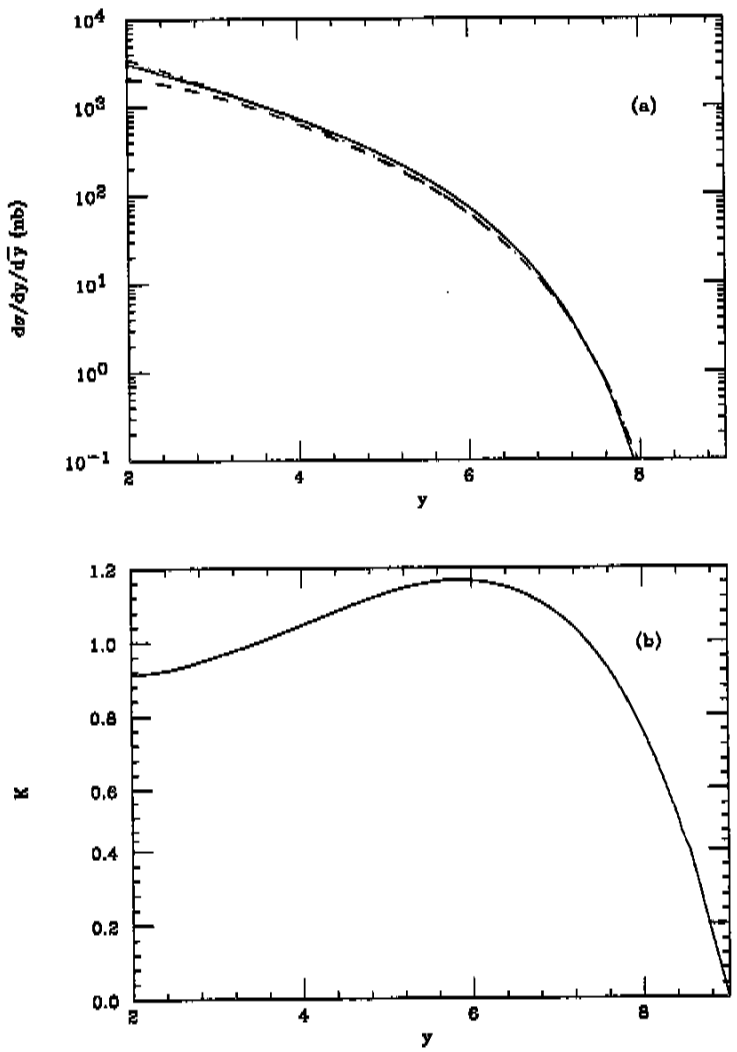


Fig. 2: Inclusive dijet production at the Tevatron, as a function of the rapidity interval $y$. The dashed and dot-dashed lines are respectively the exact and large-$y$ Born cross sections, and the solid line is the minijet-corrected cross section. (b) The $K$-factor, i.e. the ratio of the minijet-corrected cross section to the large-$y$ Born cross section, as a function of the rapidity interval $y$. The kinematic parameters for both figures are described in the text.

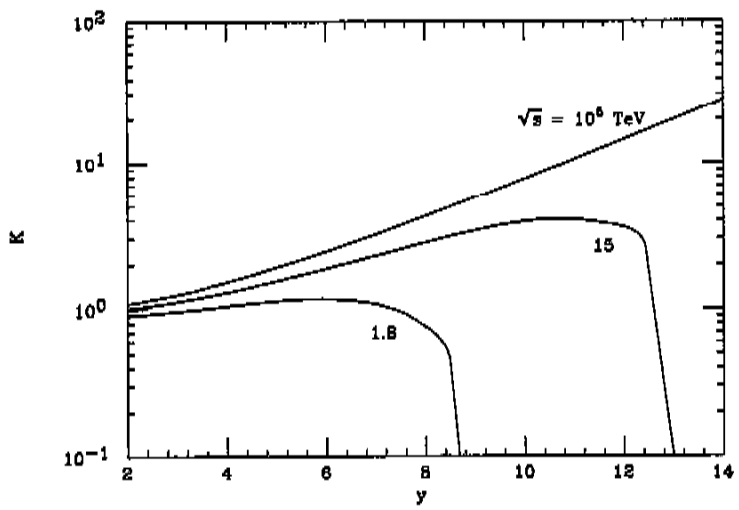


Fig. 3: $K$-factor as a function of the rapidity interval $y$ at different center-of-mass energies. The cutoff on integration over both transverse momenta is at $p_{\perp\min} = 20$ GeV. From bottom to top, the solid lines represent the $K$-factors at Tevatron energies, at LHC energies ($\sqrt{s}$= 15 TeV), and at $\sqrt{s} = 10^5$ TeV.

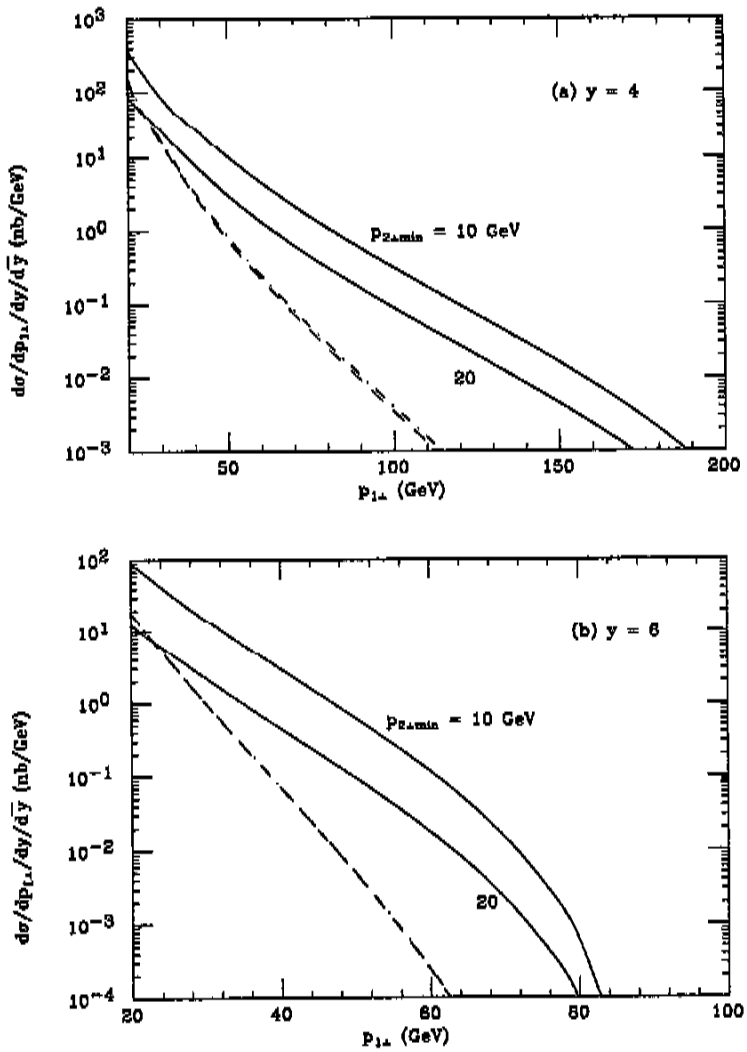


Fig 4: $p_\perp$ distribution of jet 1 at (a) $|y| = 4$ and (b) $|y| = 6$. The dashed and dotdashed lines are respectively the $p_\perp$ distributions for the exact and the large-$y$ Born cross section, for which $p_{1\perp} = p_{2\perp}$. The solid lines are the $p_\perp$ distributions of jet 1 for the minijet-corrected cross section, with two different cutoffs for jet 2, $p_{2\perp min} = 10$ GeV and 20 GeV. Notice that in (b) the dashed and dotdashed lines completely overlap.

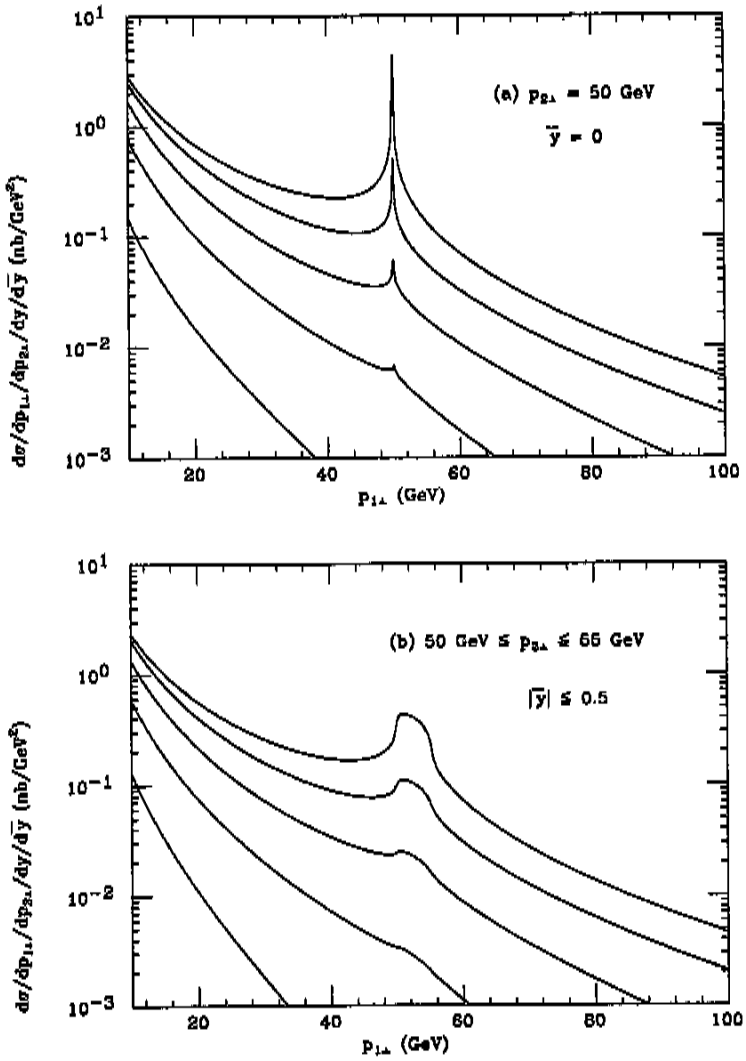


Fig. 5: $p_\perp$ distribution of jet 1 with the jet 2 transverse momentum (a) fixed at 50 GeV, and (b) integrated from 50 GeV to 55 GeV. From top to bottom, the solid lines are the $p_\perp$ distributions for the minijet-corrected cross section at $|y| = 2$, 3, 4, 5 and 6. In (b) the rapidity boost $\bar{y}$ is integrated over $|\bar{y}| \leq 0.5$.

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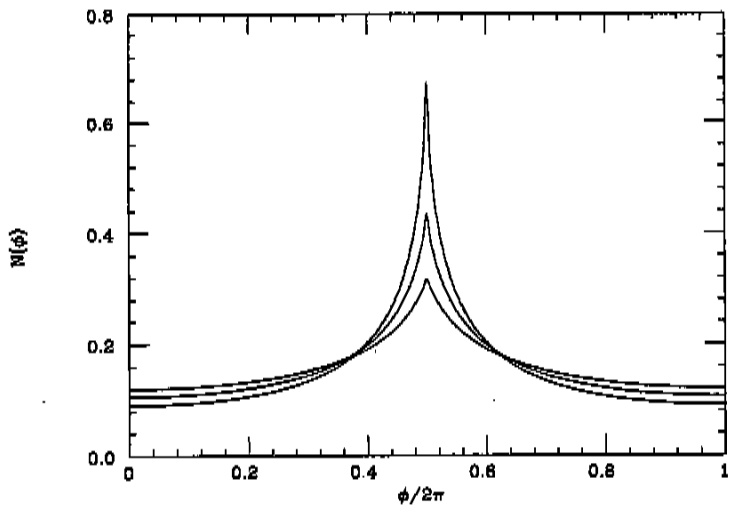


Fig. 6: $\phi$ distribution normalized to the uncorrelated cross section $d\sigma/dy\,d\bar{y}$. From top to bottom, relative to the peak, the solid lines are the $\phi$ distributions for the minijet-corrected cross section at $|y| = 5$, 6 and 7.