

Top Panel: $\frac{1}{\sqrt{s}} \frac{dN}{dp_T} \frac{d\lambda}{d\lambda}$ vs p_{TD2} (charged-only). The y-axis is logarithmic, ranging from 10^{-2} to 10^2 . The x-axis ranges from 0 to 1. The plot shows CMS data (black squares) and several Pythia 6.428 models: 345 (red dashed line with open circles), 346 (yellow dotted line with open squares), 370 (red solid line with open triangles), ambt1 (orange solid line with open triangles), z1 (red dotted line with solid circles), and z2 (green solid line with solid circles). The models generally follow the CMS data, with some variations at higher p_{TD2} .

Bottom Panel: Ratio to CMS vs p_{TD2} (charged-only). The y-axis is linear, ranging from 0.5 to 2. The x-axis ranges from 0 to 1. The plot shows the ratio of the models to the CMS data. Shaded regions indicate the uncertainty bands for the models. The ratios are generally close to 1, indicating good agreement with the CMS data.

Legend:

- CMS
- Pythia 6.428 345
- Pythia 6.428 346
- △- Pythia 6.428 370
- △- Pythia 6.428 ambt1
- Pythia 6.428 z1
- Pythia 6.428 z2

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