

Workshop Summary (no jets)

Assume W Mass, Dibosons, Taus are unique measurements or provide important tools and will continue to deserve significant manpower.

Assume data sets continue to double each year.

What should be the experimental priorities for W/Z rapidities, xsec, asymmetries, Pt, thru 2007?

What should be the theory priorities for these?

Status of Data Thru 2005 (probably incomplete)

	R and W Width	W Xsecs	Z Xsecs	Z Rapidity	W Charge Asymmetry
D0	177 pb-1 public	177 pb-1 public	177 pb-1 public	337 pb-1 public	In Progress
CDF	72 pb-1 published, 350 pb-1 public	In Progress	In Progress	In Progress	200 pb-1 public

	Z Pt	W Pt	Z dPtdy	Z Forward-Backward Asymmetry
CDF	In Progress	In Progress	In Progress	72 pb-1 public
D0	In Progress	In Progress	In Progress	177 pb-1 public

Priorities for 2006-7?

	R and W Width	W Xsecs	Z Xsecs	Z Rapidity	W Charge Asymmetry
D0					
CDF					

	W Pt	Z dPtdy	Z Forward- Backward Asymmetry
CDF			
D0			

One thing Pavel didn't show...

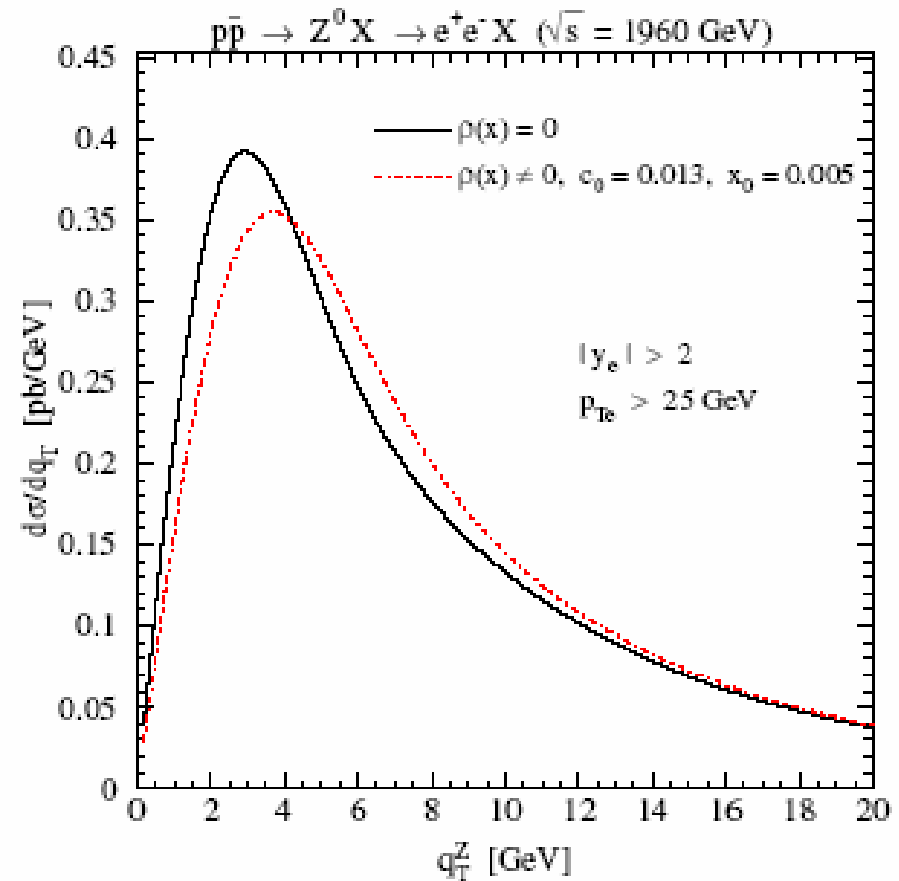
Transverse momentum resummation at small x for the Tevatron and LHC

S. B., P. Nadolsky, F. Olness, C.-P. Yuan, hep-ph/0410375

Stefan Berge, SMU, Dallas, TX
CTEQ meeting, 29/30 October '04, Fermilab

1. Introduction
2. Boson production at Hadron Colliders
3. Numerical Results
4. Conclusion

grid files for W and Z^0 boson production at Tevatron Run II can be downloaded from:
hep.pa.msu.edu/~nadolsky/ResBos/small-x/
www.physics.smu.edu/~berge/small-x/



$|y_e| > 2, p_{T_e} > 25$ GeV

Priorities for 2006-7?

	R and W Width	W Xsecs	Z Xsecs	Z Rapidity	W Charge Asymmetry
D0	SM TEST WMASS	0?	0?	LOW? In dPtdy?	HIGH
CDF	SM TEST WMASS	0?	0?	LOW? In dPtdy?	HIGH

	W Pt	Z dPtdy and Z Pt	Z Forward- Backward Asymmetry
CDF	HIGH	HIGH	SM TEST
D0	HIGH	HIGH	SM TEST

Theory priorities (no jets)

W mass:

Multi-Photons in WGrad (+Resbos?),
New Resummation in Resbos,
Rapidity dependence of Resummation in Resbos(?),
PDF Error Metric and better u and d quarks,
ISR QED radiation in PDFs, other?

Non Wmass:

NNLO with lepton kinematics, other?

BACKUP



