

Jets in Charm Photoproduction

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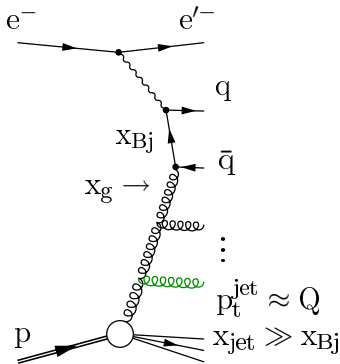
H1 DESY

DESY Cracow meeting
October 2007

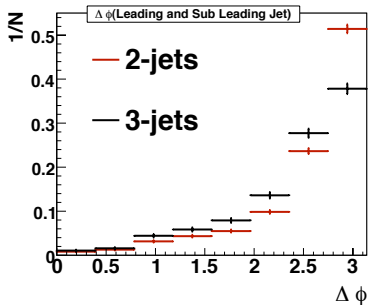


Motivation (reminder)

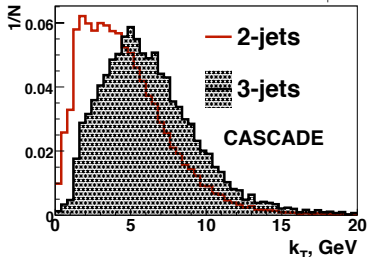
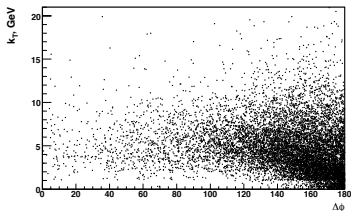
- ▶ Use charm to:
 - ▶ select BGF
 - ▶ small x_g region
 - ▶ Hard scale to perform pQCD in Photoproduction
 - ▶ Relatively easy to reconstruct with the meson D^*
 - ▶ use the scale $\mu^2 = 4 \cdot m_c^2 + p_t^2$:
 $0.5 < p_t^2/\mu^2 < 5$
- ▶ BUT:



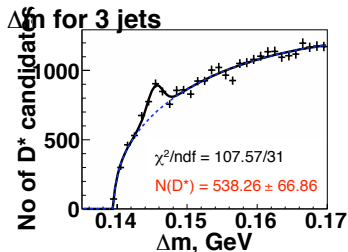
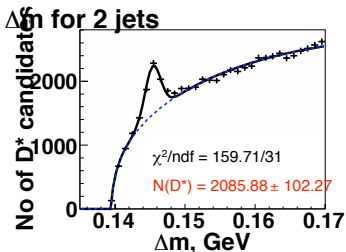
D^* and di-jets in γ -p



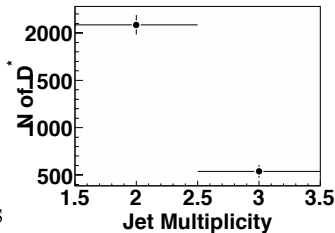
- ▶ k_T of the gluon is directly sensitive to the $\Delta\phi$ between the jets
- ▶ On generator level the two and three jet case differ significantly



Jet Multiplicity



- ▶ Good statistics for 2 and 3 jets
- ▶ Use the hard central jets (5 GeV) for trigger
- ▶ extend the η range and search for forward jets



Current Status

- ▶ Physics trigger defined
- ▶ Satisfactory efficiency even for the lowest p_t bin
- ▶ Next step is to measure for cross sections

s74 for di-jets

