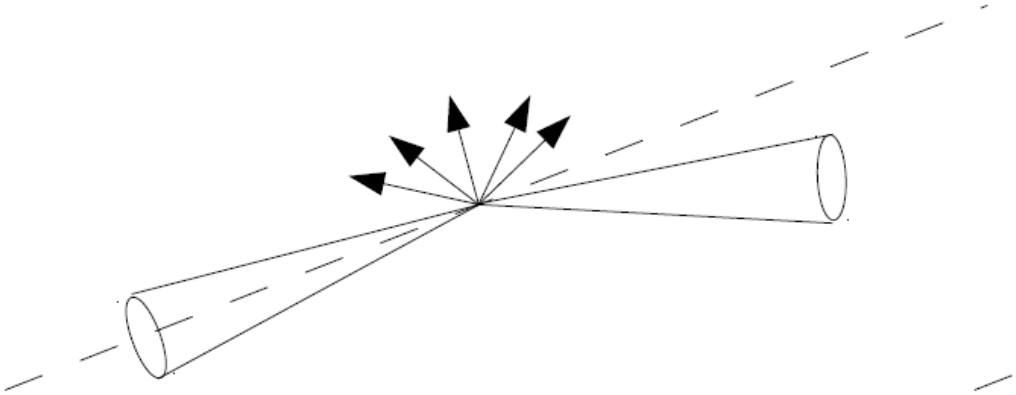
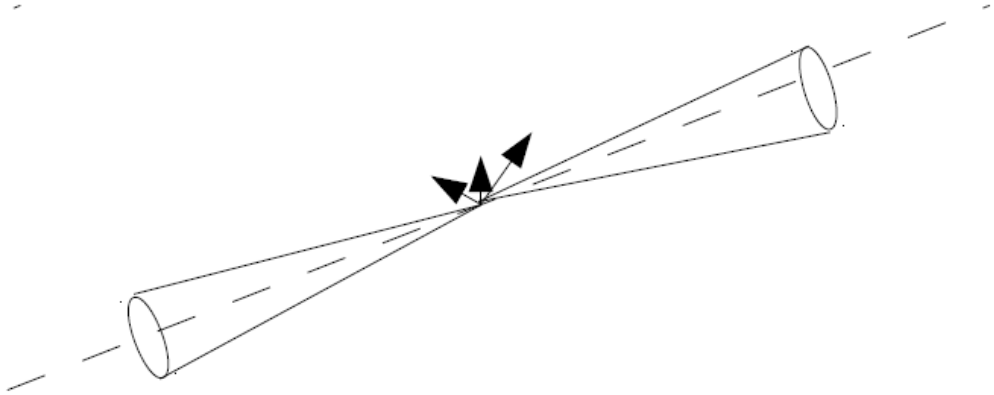
Mueller-Navelet dijet decorrelations:

$\Delta\phi$ for large Δy



BFKL: large jet $\Delta\eta$:
parton emissions, decorrelation



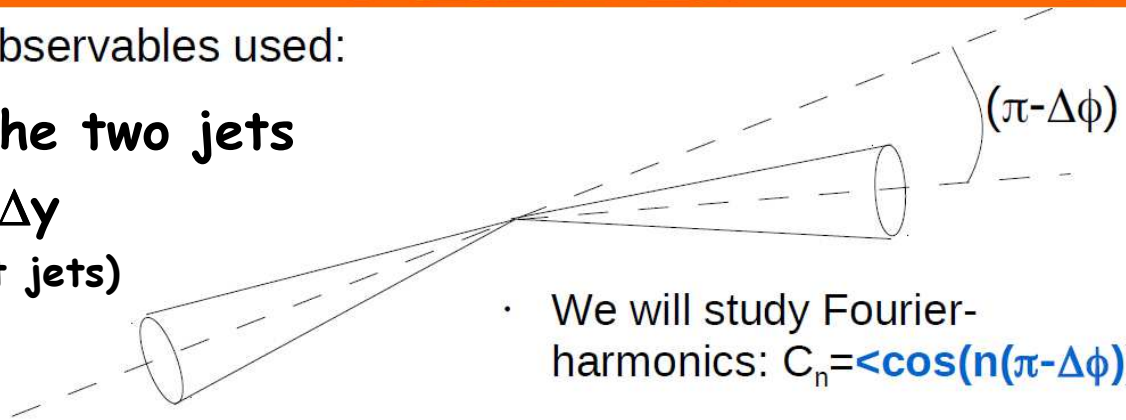
DGLAP: low p_T emissions,
independent of jet $\Delta\eta$: no decorrelation

Azimuthal decorrelation of jets at large y

CMS, arXiv:1601.06713, JHEP 08 (2016) 139

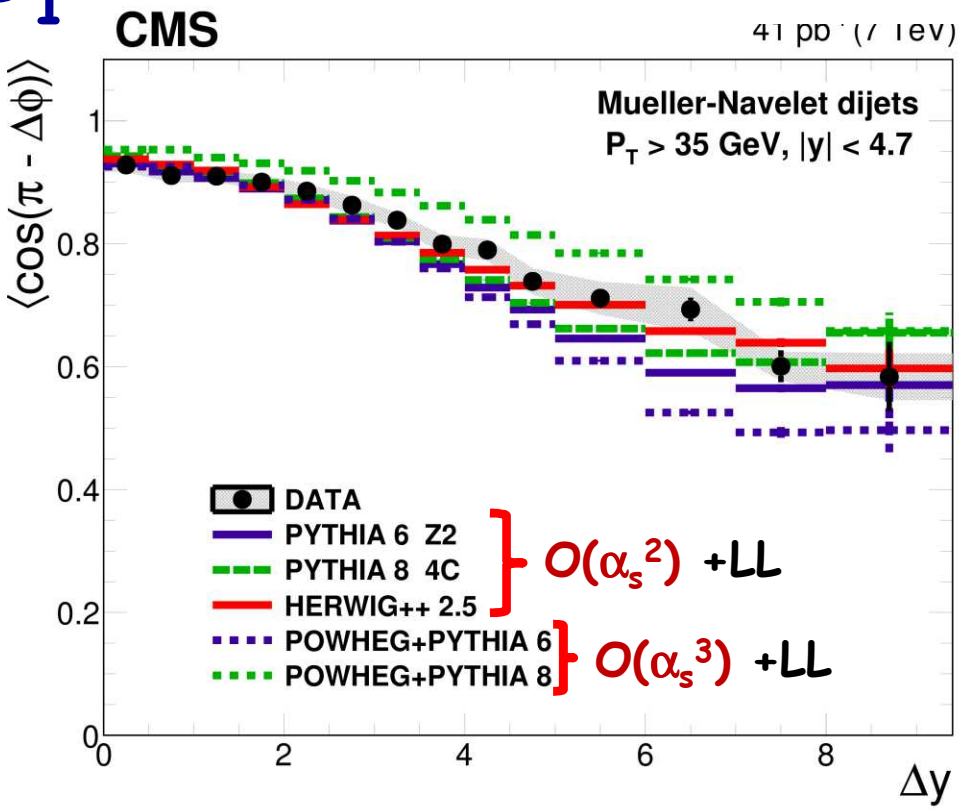
The observables used:

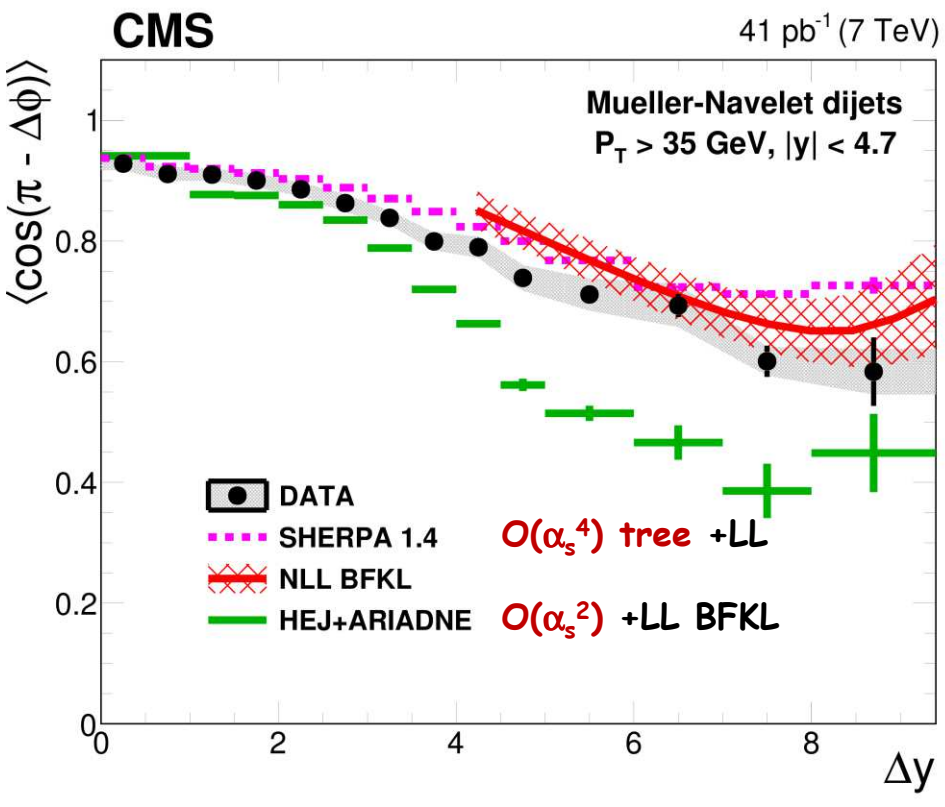
$\Delta\phi$ between the two jets with largest Δy (Mueller-Navelet jets)



- We will study Fourier-harmonics: C_n=<cos(n(π-Δφ))>

C_1





Same for 2nd moment C_2

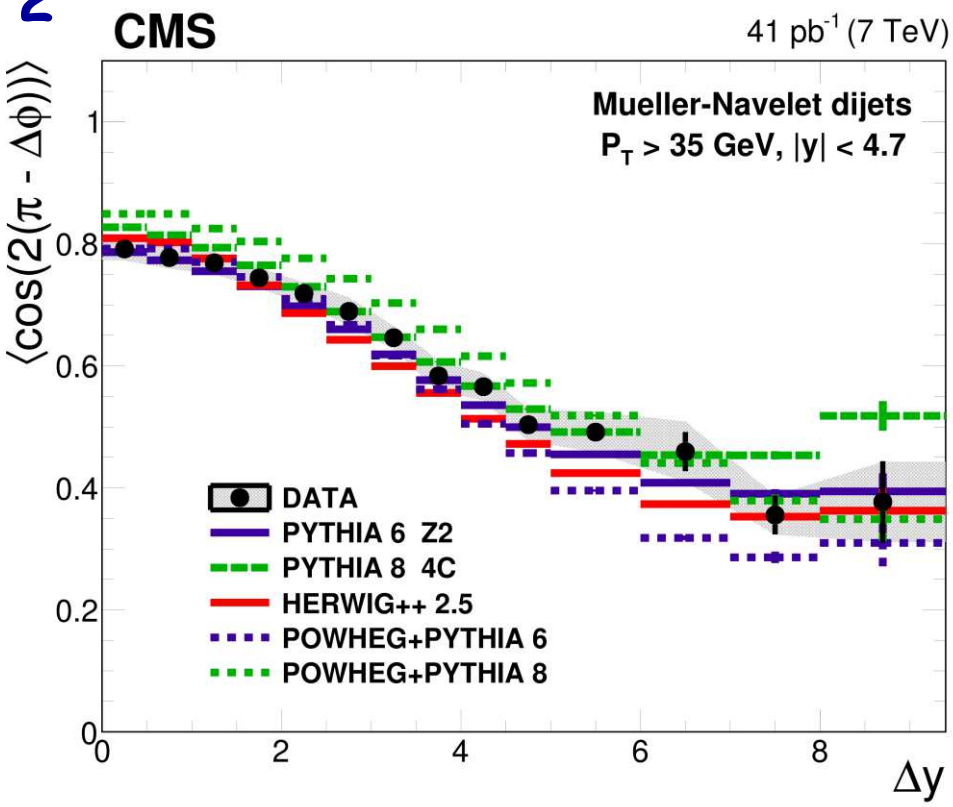
CMS, arXiv:1601.06713, JHEP 08 (2016) 139

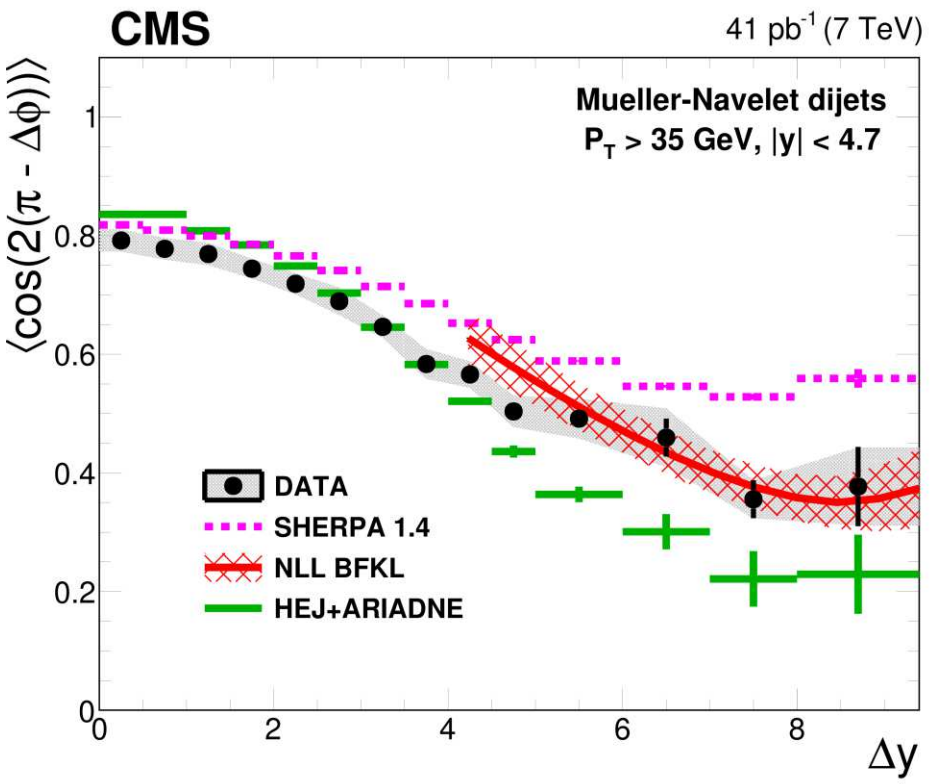
similar for C_3, see backup

- **BFKL describes data**

  … **but so does DGLAP** (with suitable LL tuning)

C_2



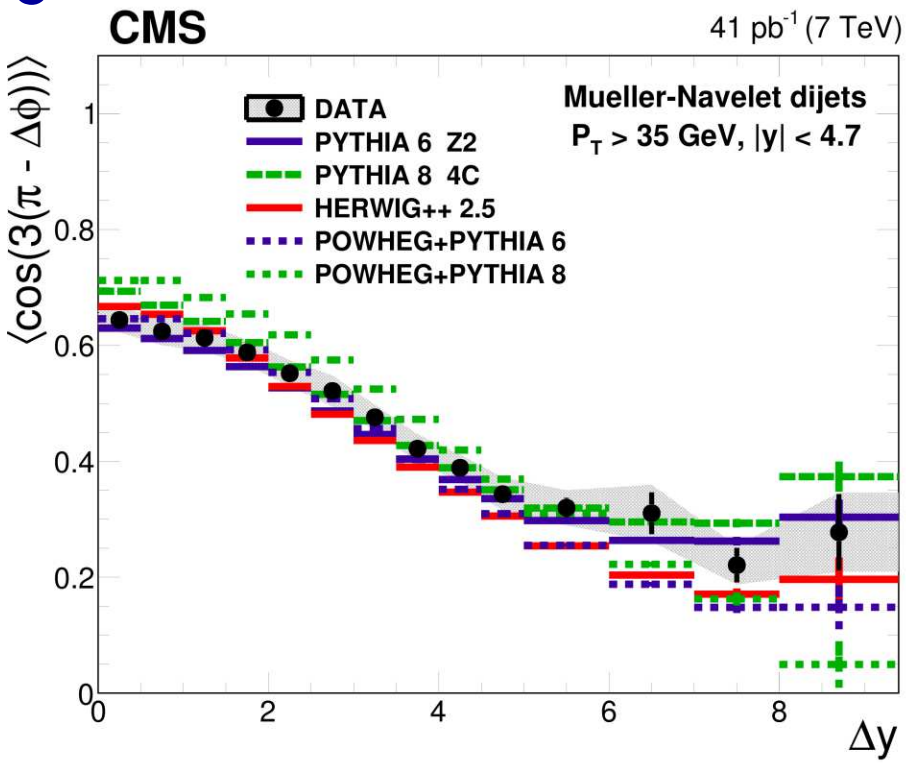


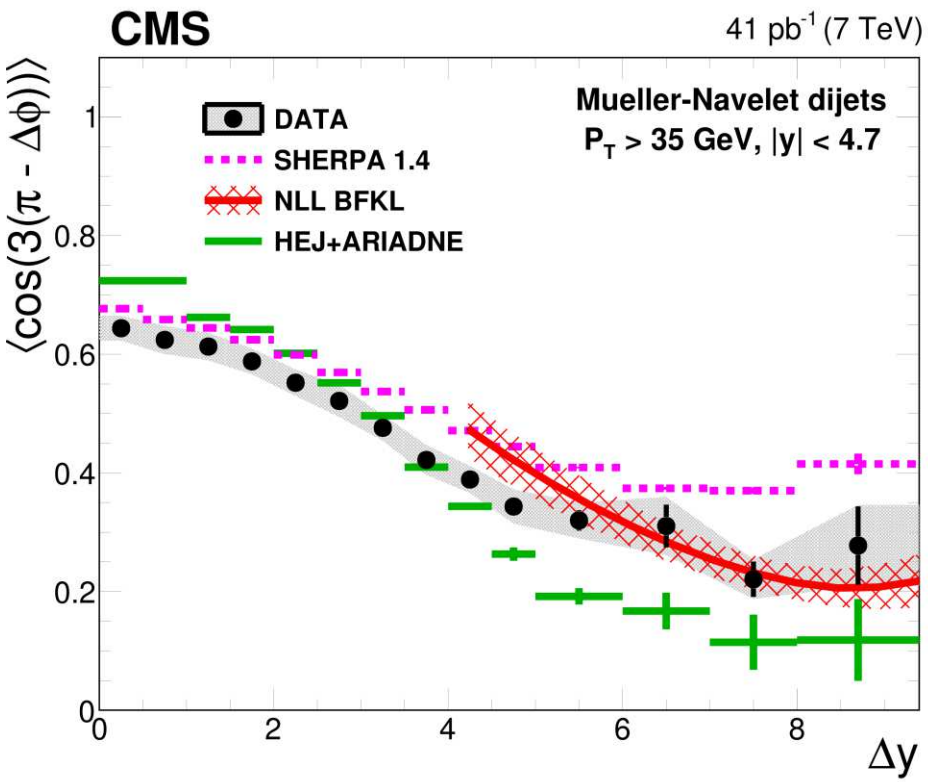
Same for 2nd moment C_3

CMS, arXiv:1601.06713, JHEP 08 (2016) 139

- **BFKL describes data**
  - … **but so does DGLAP** (with suitable LL tuning)

C_3

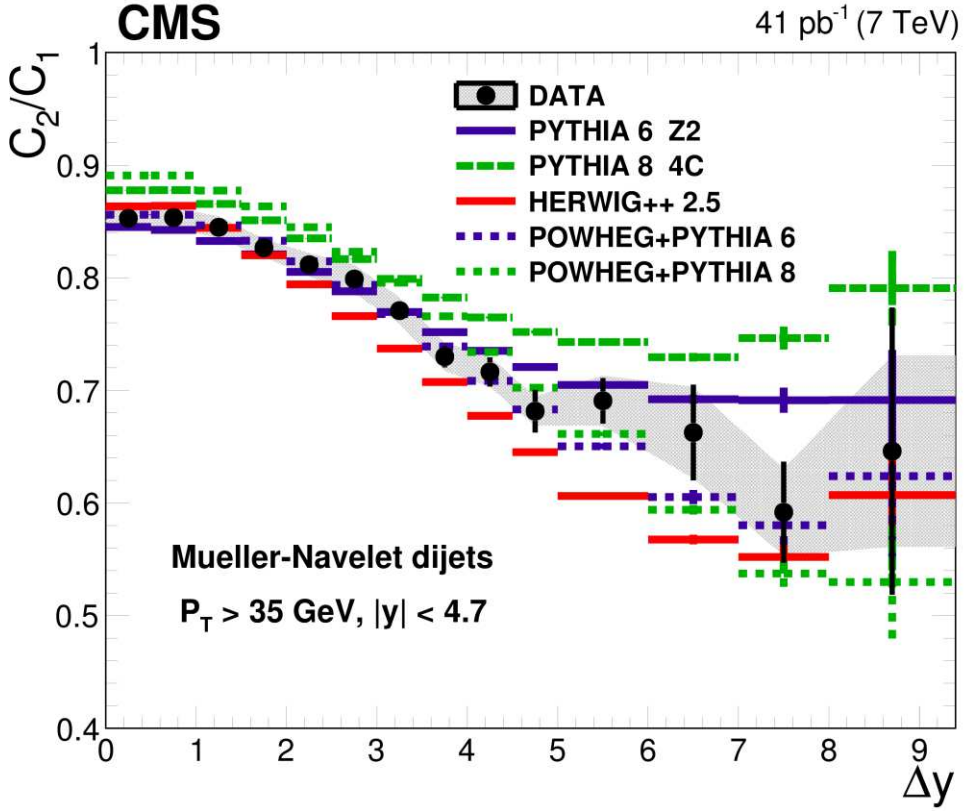


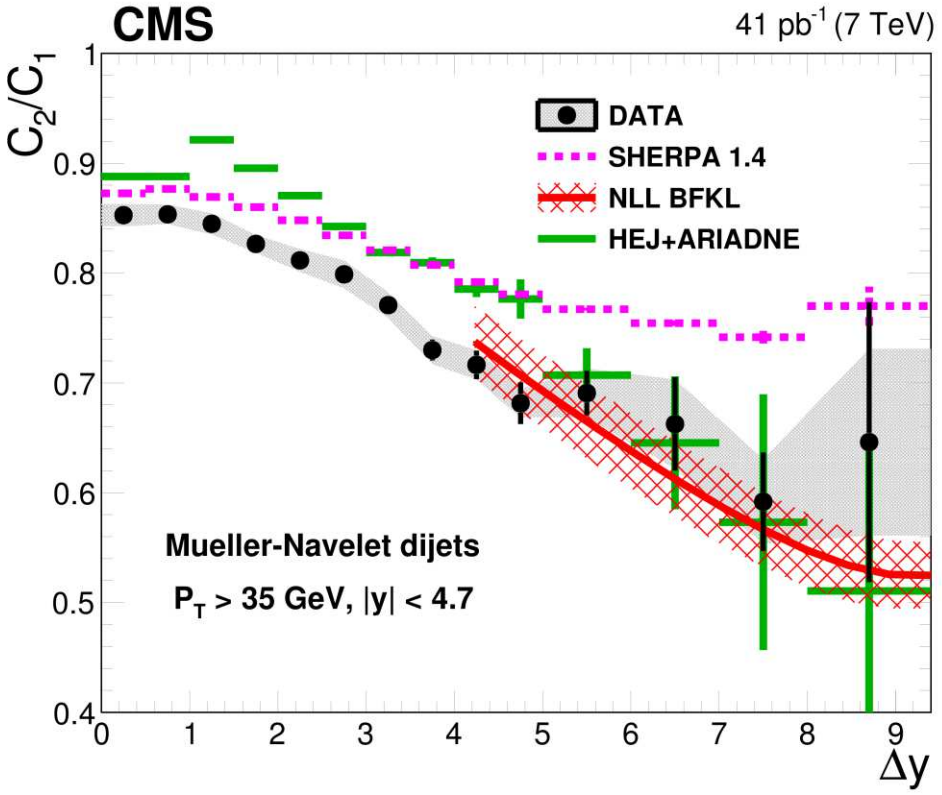


C_2/C_1 ratio

CMS, arXiv:1601.06713, JHEP 08 (2016) 139

- "suppresses DGLAP effects"





C_3/C_2 ratio

CMS, arXiv:1601.06713, JHEP 08 (2016) 139

- **BFKL describes data**

  … but so does DGLAP (with suitable LL tuning)

official paper statement:

The observed sensitivity to the implementation of the colour-coherence effects in the DGLAP MC generators and the reasonable data-theory agreement shown by the NLL BFKL analytical calculations at large Δy, may be considered as indications that the kinematical domain of the present study lies in between the regions described by the DGLAP and BFKL approaches. Possible manifestations of BFKL signatures are expected to be more pronounced at increasing