

# Some Aspects of Multiparticle-Production in Forward Jets and Displaced Vertices at the LHC

Luebbo von Lindern, Oldenburg (Oldb.)

Multiparticle Production has far reaching roots in Cosmic Ray-research.

- Early 1930's "Hoffmann'sche Stösse"
- 1936 – 1953 "Explosions-Schauer"
- early 1950 Thermodynamic and Hydrodynamic modelling
- Later 1950's "Jets", angular and spectral distributions
- Since 1960's "Standard Model" pushed "Jets" out of focus

Now "Jets" are gaining focus again.

As in their CR counterparts Forwardjets could become of main interest in their angular distribution.

Are CR-jet-analyses comparable or in discrepancy to LHC-results ?

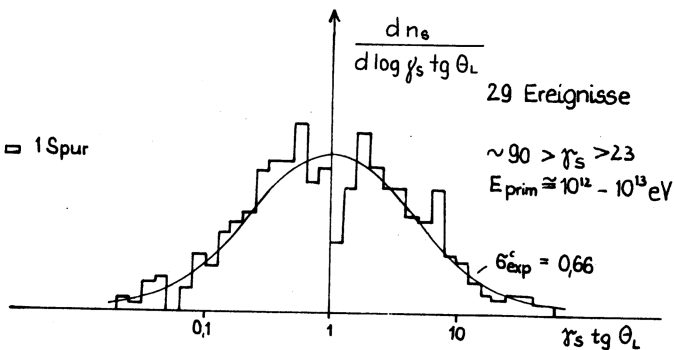
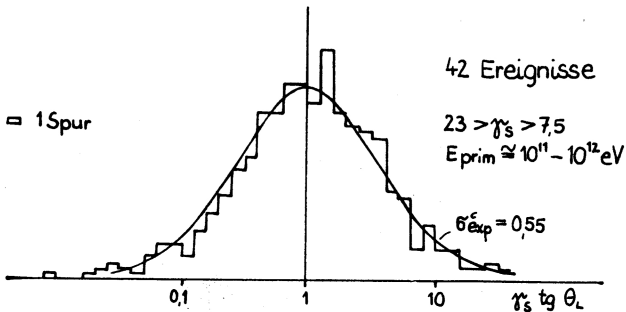
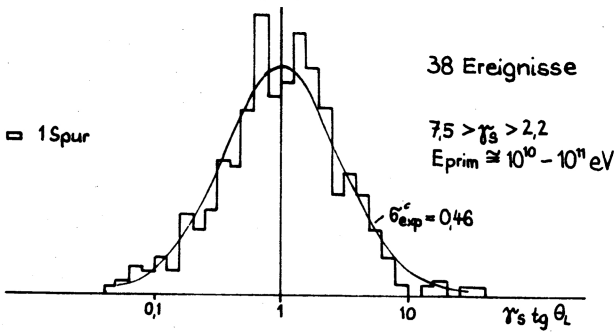
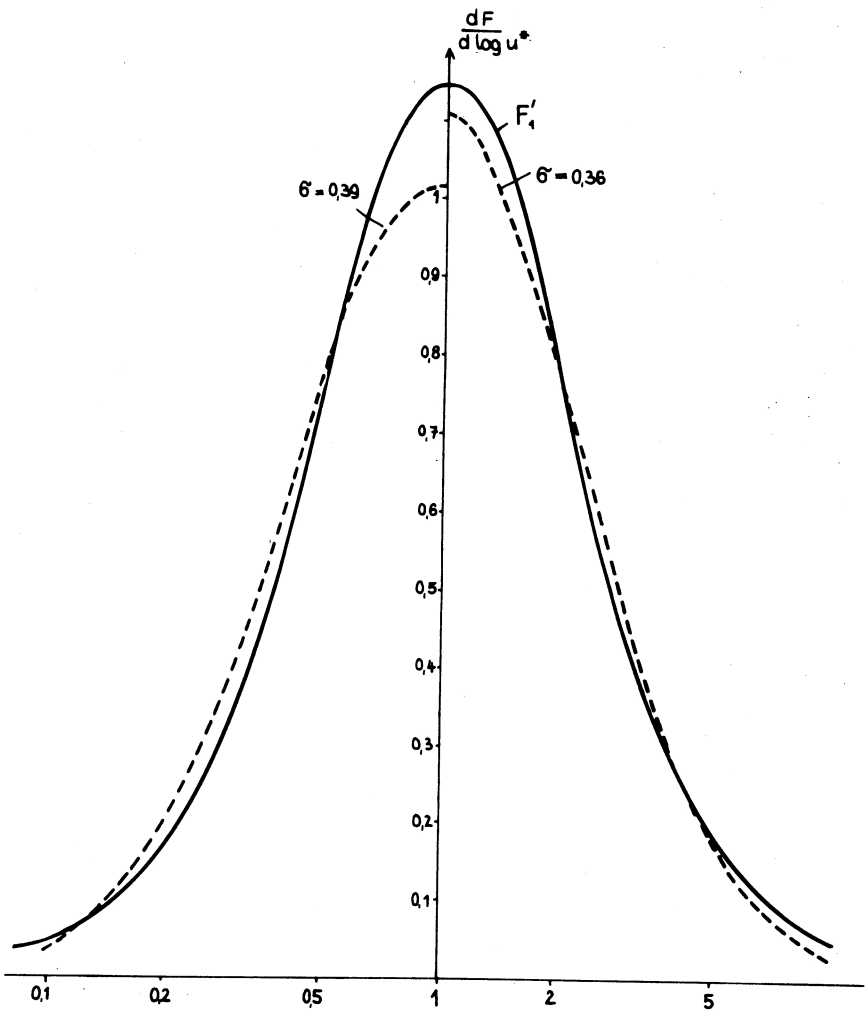


Abb. 21

Ereignisse mit  $n_s \geq 6, N_h \leq 5$

LHC Working Group on Forward Physics and Diffraction, 2  
 Differentielle Verteilung von Produkten  $\gamma_s \text{ tg } \theta_L$ , die  
 von Ciolek et al. (C1 58<sup>a, b</sup>) erhalten wurden.



Differentielle Winkelverteilung im L-System für

Isotropie und  $m=1$  im S-System sowie

Approximation durch Gaußkurven (-----).

$$u^* = r_s \tan \theta_L$$

Displaced vertices in LHCb. Results and prospects.

by **Victor Coco** NIKHEF

Implications of LHC results for TeV scale physics

13. – 17. July 2012 CERN