

HADRON DIFFRACTION IN THE MULTIPOLE  
POMERON MODEL

*K. J. Kontros, A. I. Lengyel, Z. Z. Tarics*

Institute of Electron Physics, Nat. Acad. Sci. of Ukraine  
(21, Universitetska Str., Uzhgorod 88017, Ukraine;  
e-mail: iep@iep.uzhgorod.ua)

S u m m a r y

We assume that the pomeron is a sum of Regge multipoles, each corresponding to a finite gluon ladder. From a fit to the diffraction cone data of pp- and  $\bar{p}p$ -scattering, we found that the triple pole is significant for the rise of the ratio  $\sigma_{el}/\sigma_{tot}$  at high energies. To study the peculiarities of the diffraction cone curvature, the local nuclear slope parameter in both the multipole pomeron and soft diffraction models was used. This slope parameter is compared with its values derived from the experiment.