

## Meson-baryon scattering in the Regge realm

*Wednesday, 17 July 2019 10:00 (30 minutes)*

We present a model for the Regge phenomenology of meson-baryon scattering at high energies. Diffraction features of  $\pi$ -N and KN elastic scatterings are described by the Pomeron trajectory which we newly formulated to apply for high energy data. On the basis of the Reggeized meson exchanges in the t-channel we also discuss  $N^*$  resonances in the  $\pi$ -N scatterings by using the parameterization of the Breit-Wigner type for a fit of data. The s-wave phase shift is applied to describe the low energy data on KN scattering. Summary and conclusions are given for the respective features of elastic and inelastic processes from threshold to tens of GeV with a stress on the applicability of the present model.

**Primary author:** Prof. YU, Byung Geel (Korea Aerospace University)

**Presenter:** Prof. YU, Byung Geel (Korea Aerospace University)

**Session Classification:** Modern problems in nuclear and elementary particle physics