Contribution ID: 12 Type: Talks

A double-Regge exchange model for high-energy $\eta^{(\prime)}\pi$ photoproduction

The study of $\eta^{(\prime)}\pi$ photoproduction is particularly interesting for the search for the lowest lying hybrid meson with exotic quantum numbers, the $\pi_1(1600)$, at the GlueX experiment at Jefferson Lab. In this talk, I will present a model based on a double-Regge exchange of vector trajectories for $\eta^{(\prime)}\pi$ photoproduction at high energies. The model successfully describes CLAS data at large $\eta\pi$ invariant mass and predicts a sizable forward-backward angular asymmetry at GlueX energies, larger in $\eta'\pi$ than in $\eta\pi$, indicating the presence of strong exotic partial waves in the resonance region, particularly in the $\eta'\pi$ channel.

Author: MONTANA, Gloria (Universitat de Barcelona & ICCUB)

Presenter: MONTANA, Gloria (Universitat de Barcelona & ICCUB)

Session Classification: GlueX/CLAS: Moments