Plenary talk

Reaction dynamics for photoproductions of baryon resonances

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摘要

The study of exotic structure of hadrons is fully achieved when reaction dynamics of the associated hadron productions is well understood. We employ as the standard mechanism the effective Lagrangian method and investigate several physical observables within the framework. The parameters are constrained by microscopic description of hadrons. We discuss photoproductions of kaon associated with the ground state $\Lambda(1116)$ and its resonances $\Lambda(1405)$ and $\Lambda(1520)$. In the former example we emphasize the meson cloud effect which significantly renormalizes the phenomenological parameters, while in the latter we discuss the features of the standard method. Finally we discuss briefly the production of $\eta\pi$ associated with the nucleon resonance N(1535) for the study of chiral symmetry of baryons.

关键词 photoproduction, strangeness, baryon resonances

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