ID contributo: 274 Tipo: Contributed

Photocouplings of hidden-charm pentaquarks

venerdì 9 giugno 2023 10:20 (20 minuti)

Photocouplings of pentaquarks are crucial ingredients for photoproduction experiments at JLab which aim to confirm the existence of the hidden-charm pentaquarks reported by the LHCb Collaboration using electromagnetic probes. Photocouplings of ground- and excited-state hidden-charm pentaquarks are analyzed in a quark model approach in which we distinguish between light (u, d and s) and heavy (c) quarks. Out of a large amount of possible pentaquark states only very few have nonvanishing photocouplings. Moreover, due to the large momentum of the photon these couplings are largely suppressed. We provide their decay widths as a function of their yet unobserved charge radius.

Autore principale: ORTIZ-PACHECO, Emmanuel (Ljubljana)

Relatore: ORTIZ-PACHECO, Emmanuel (Ljubljana)

Classifica Sessioni: Exotic hadrons and candidates

Classificazione della track: Exotic hadrons and candidates