

Search for Exotics in B decays at LHCb

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Out of all the unexpected particles discovered in the past two decades, about 30 observed exotic hadrons candidates, i.e. ones that do not fit into the paradigms of either bosonic or fermionic baryons, have masses in the same region as conventional charmonium states (charmonium-like) or bottomonium-like. For these enigmatic exotic hadrons observed to date, no scientific consensus has yet emerged to explain all of them and their formation, properties, structure by means of a single, universal theoretical principle. It is this pattern of one unexpected result after another, with the emergence of desperately few connections, that has characterized the last 20 years of experimental studies in this field. This presentation is aimed at briefly introducing this rapidly expanding field of QCD exotica and take a guided tour through the process of finding new exotics in B meson decays in data collected at LHCb experiment in the last 12 years.

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