



Contribution ID: 30

Type: **Leading contributed talk**

## Exotic spectroscopy at LHCb

*Monday, 8 July 2024 14:15 (25 minutes)*

Heavy-flavor hadrons with non-conventional properties have been observed over the past two decades. Some of these states have both quarkonium and exotic interpretations, while several other states exhibit a distinct exotic internal structure, including charged, open-flavor, double heavy-flavor, and full heavy-flavor states. Interpretations of these states vary, ranging from tightly-bound compact multiquark objects to loosely-bound hadronic molecules. The searches for new exotic candidates provide not only insights on the quark binding mechanisms within hadrons but also offers valuable inputs for a better understanding of the non-perturbative regime of QCD. In this context, the LHCb experiment, dedicated to studying heavy-flavor hadrons using hadron collision data from the LHC operation, plays a crucial role as demonstrated by the large number of new states observed. In this presentation, the latest results from LHCb regarding exotic hadron spectroscopy are shown.

### **session**

B. Hadron Spectroscopy

**Primary author:** ROMOLINI, Gabriele (Universita e INFN, Ferrara (IT))

**Co-author:** SPEAKERS BUREAU, LHCb (LHCb)

**Presenter:** ROMOLINI, Gabriele (Universita e INFN, Ferrara (IT))

**Session Classification:** B. Hadron Spectroscopy