

# Results of hadron spectroscopy at LHCb

*Thursday, 20 October 2022 09:35 (35 minutes)*

Hadron spectroscopy is a field of considerable interest for validating predictions of the Heavy Quark effective theory and calculations of Lattice QCD at low energies. LHCb has been the main player in the field, having observed more than 50 new hadrons, both conventional and exotic. This talk will present new exciting results released by LHCb recently. On the one hand, for conventional spectroscopy, results from excited states of  $\Xi_b$  and  $\Xi_c$  and the first searches for hadrons containing bc quarks will be discussed. On the other hand, for exotic spectroscopy, results about new tetraquark and pentaquark candidates will be presented, notably the observation of the doubly charmed  $T_{cc}(3875)^+$  tetraquark, the first tetraquark doublet,  $T_{cs0}(2900)^{0/++}$ , and, finally, the first pentaquark with strangeness,  $P_{\psi s}^{\Lambda}(4338)^0$ .

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