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## **【404】 Charmless hadronic B decays at LHCb: results and prospects**

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Charmless  $b$ -hadron decays are good probes to test the Standard Model and search for New Physics. Of particular interest are the  $B_s^0$  decays to final state with light resonances ( $\eta$ ,  $\eta'$  or  $\phi$ ) that can be used for time-dependent CP violation studies. The “golden”  $B_s^0 \rightarrow \phi\phi$  mode has already been used by LHCb to measure the CP-violating phase difference between the  $B_s^0$  mixing amplitude and the  $b \rightarrow s\bar{s}s$  decay amplitude. We present the results of the search for the yet unobserved  $B_s^0 \rightarrow \eta'\phi$  decays using the full data sample from LHCb Run1, as well as prospects for the other modes of this family using the LHCb Run2 data.

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