

Study of charmless $B \rightarrow VV$ decays at LHCb

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Charmless B-meson decays into two vector mesons, $B \rightarrow VV$, serve as a powerful probe for the dynamics of weak and strong interactions through their angular distributions. This report will introduce recent LHCb results on $B \rightarrow VV$ decays, including:

1. First observation of CP violation and measurement of polarization in $B^+ \rightarrow \rho(770)^0 K^{*}(892)^+$ decays
2. Measurement of the branching fractions and longitudinal polarisations of $B(s)^0 \rightarrow K(892)^0 K\bar{K}(892)^0$ decays
3. Measurement of CP violation in $B_s^0 \rightarrow \phi\phi$ and search for $B^0 \rightarrow \phi\phi$

Primary author: 童, 星昱 (Peking University)

Presenter: 童, 星昱 (Peking University)

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