

Heavy FLavor AVeraging group (HFLAV) - August 2017

Compilation of B_c^+ Branching Fractions - UL at 90% CL

In PDG2014 **New since PDG2014 (preliminary)** **New since PDG2014 (published)**

RPP#	Mode	PDG2014 AVG.	LHCb	Our Avg.
	$f_c \mathcal{B}(B_c^+ \rightarrow K^+ K^0) / f_u \mathcal{B}(B^+ \rightarrow K_S^0 \pi^+)$	‡	$< 5.8 \times 10^{-2}$ [1]	$< 5.8 \times 10^{-2}$
	$f_c \mathcal{B}(B_c^+ \rightarrow p \bar{p} \pi^+) / f_u$		$< 2.8 \times 10^{-8}$ [2]	$< 2.8 \times 10^{-8}$
	$\sigma(B_c^+) \mathcal{B}(B_c^+ \rightarrow K^+ K^- \pi^+) / \sigma(B^+)$	†	$< 15 \times 10^{-8}$ [3]	$< 15 \times 10^{-8}$

† Measured in the annihilation region $m(K^- \pi^+) < 1.834 \text{ GeV}/c^2$.

‡ PDG converts the LHCb result to $f_c \mathcal{B}(B_c^+ \rightarrow K^+ K^0) < 4.6 \times 10^{-7}$.

References

- [1] R. Aaij *et al.*, (LHCb collaboration), Phys. Lett. **B726**, 646, (2013), [arXiv:1308.1277](#) [hep-ex].
- [2] R. Aaij *et al.*, (LHCb collaboration), Phys. Lett. **B759**, 313, (2016), [arXiv:1603.07037](#) [hep-ex].
- [3] R. Aaij *et al.*, (LHCb collaboration), Phys. Rev. **D94**, 091102, (2016), [arXiv:1607.06134](#) [hep-ex].