Heavy Flavor Averaging Group - October 2016

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

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

RPP#	Mode	PDG2014 AVG.	CDF	LHCb	Our Avg.
	$f_c\mathcal{B}(B_c^+ \to K^+K^0)/f_u\mathcal{B}(B^+ \to K_S^0\pi^+)$	*		$< 5.8 \times 10^{-2}$	$< 5.8 \times 10^{-2}$
	$f_c\mathcal{B}(B_c^+ \to p\bar{p}\pi^+)/f_u$			$< 2.8 \times 10^{-8}$	$< 2.8 \times 10^{-8}$
	$\sigma(B_c^+)\mathcal{B}(B_c^+ \to K^+K^-\pi^+)/\sigma(B^+)^\dagger$			$< 15 \times 10^{-8}$	$< 15 \times 10^{-8}$

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

† measured in the annililation region m$(K^-\pi^+) < 1.834$GeV$/c^2$

B_c^+ Branching Fractions: LHCb References

[1] LHCb Collaboration, (R. Aaij *et al.*), Phys. Lett. B **726**, 646 (2013).

[2] LHCb Collaboration, (R. Aaij *et al.*), Phys. Lett. B **759**. 313 (2016)

[3] LHCb Collaboration, (R. Aaij *et al.*), arXiv:1607.06134