

Uncertainty [  $\sqrt{s} = 7$  TeV ]

Source	$A_P(B^+)$	$A_P(B^0)$	$A_P(B_s^0)$	$A_P(\Lambda_b^0)$
Signal mass shape	0.0016	0.0005	0.0036	0.0024
Decay-time bias	0.0000	0.0000	0.0008	0.0004
$\Delta m_d$ , $\Delta m_s$	0.0000	0.0001	0.0014	0.0007
Decay-time resolution	0.0000	0.0000	0.0026	0.0014
Final-state radiation	0.0000	0.0001	0.0000	0.0001
Decay-time reconstruction efficiency	0.0000	0.0001	0.0000	0.0001
Combinatorial background mass shape	0.0003	0.0000	0.0004	0.0003
Partially reconstructed background mass shape	0.0000	0.0000	0.0029	0.0015
$\Delta\Gamma_s$	0.0000	0.0000	0.0000	0.0000
$A_D(K^+)$	0.0018	0.0000	0.0000	0.0013
$ q/p _{B^0}$ , $ q/p _{B_s^0}$	0.0000	0.0009	0.0021	0.0013
Uncertainties from fragmentation fractions	0.0000	0.0000	0.0000	0.0058
Difference between $\omega_i$ or $\omega_i^{\text{data}}$	0.0003	0.0003	0.0003	0.0003
Neglecting term with $A_P(\Xi_b)$ in Eq. 3	0.0000	0.0000	0.0000	0.0071
Validity of $N_b = N_{\bar{b}}$ in each bin	0.0000	0.0000	0.0000	0.0032
$A_{CP}(B^+ \rightarrow J/\psi K^+)$	0.0028	0.0000	0.0000	0.0028
$A_D(\bar{K}^0)$	0.0001	0.0000	0.0000	0.0002
Total systematic uncertainty	0.0037	0.0011	0.0059	0.0108

Uncertainty [  $\sqrt{s} = 8$  TeV ]

Source	$A_P(B^+)$	$A_P(B^0)$	$A_P(B_s^0)$	$A_P(\Lambda_b^0)$
Signal mass shape	0.0006	0.0004	0.0035	0.0021
Decay-time bias	0.0000	0.0000	0.0008	0.0004
$\Delta m_d$ , $\Delta m_s$	0.0000	0.0001	0.0015	0.0008
Decay-time resolution	0.0000	0.0000	0.0028	0.0016
Final-state radiation	0.0000	0.0001	0.0001	0.0001
Decay-time reconstruction efficiency	0.0000	0.0001	0.0001	0.0001
Combinatorial background mass shape	0.0002	0.0000	0.0004	0.0003
Partially reconstructed background mass shape	0.0000	0.0000	0.0027	0.0015
$\Delta\Gamma_s$	0.0000	0.0000	0.0001	0.0001
$A_D(K^+)$	0.0014	0.0000	0.0000	0.0011
$ q/p _{B^0}$ , $ q/p _{B_s^0}$	0.0000	0.0009	0.0021	0.0014
Uncertainties from fragmentation fractions	0.0000	0.0000	0.0000	0.0025
Difference between $\omega_i$ or $\omega_i^{\text{data}}$	0.0002	0.0003	0.0003	0.0003
Neglecting term with $A_P(\Xi_b)$ in Eq. 3	0.0000	0.0000	0.0000	0.0046
Validity of $N_b = N_{\bar{b}}$ in each bin	0.0000	0.0000	0.0000	0.0033
$A_{CP}(B^+ \rightarrow J/\psi K^+)$	0.0028	0.0000	0.0000	0.0027
$A_D(\bar{K}^0)$	0.0001	0.0000	0.0000	0.0002
Total systematic uncertainty	0.0032	0.0010	0.0059	0.0076