

| Source | Uncertainty [%] | | | |
|---|-------------------|----------------------|----------------------|--------------------------|
| | $R_{D_s^+/\pi^+}$ | $R_{D_s^{*+}/\pi^+}$ | $R_{D_s^{*+}/D_s^+}$ | $\Gamma_{\pm\pm}/\Gamma$ |
| Simulated $p_T(B_c^+)$ spectrum | 1.5 | 1.9 | 0.4 | 0.1 |
| Simulated $ \eta(B_c^+) $ spectrum | 0.7 | 0.7 | 0.1 | 0.2 |
| B_c^+ lifetime | 0.1 | < 0.1 | – | – |
| D_s^+ lifetime | 0.4 | 0.4 | – | – |
| Tracking efficiency | 1.0 | 1.0 | < 0.1 | < 0.1 |
| Pile-up effects | 1.0 | 1.0 | – | – |
| χ^2/N_{dof} cut efficiency | 3.2 | 3.2 | – | – |
| Impact parameter cuts efficiency | 0.2 | 0.2 | – | – |
| BDT cut efficiency | 1.3 | 1.3 | – | – |
| Trigger efficiency | 0.6 | 0.6 | – | – |
| Other D_s^+ decay modes | 1.6 | 1.6 | – | – |
| $B_c^+ \rightarrow J/\psi D_s^{(*)+}$ signal fit: | | | | |
| D_s^+ signal mass modelling | 1.8 | 0.5 | 1.3 | 0.8 |
| D_s^{*+} signal mass modelling | 0.6 | 1.2 | 1.7 | 2.7 |
| Signal angular modelling | 0.4 | < 0.1 | 0.4 | 0.6 |
| Background mass modelling | 6.0 | 9.0 | 3.2 | 1.0 |
| Background angular modelling | 0.9 | 1.3 | 2.1 | 2.4 |
| $B_s^0 \rightarrow \mu^+ \mu^- \phi$ triggers | 0.8 | 0.5 | 1.3 | 4.0 |
| D_s^{*+} branching fractions | < 0.1 | < 0.1 | < 0.1 | 0.7 |
| $B_c^+ \rightarrow J/\psi \pi^+$ signal fit: | | | | |
| Signal modelling | 4.2 | 4.2 | – | – |
| PRD/comb. background modelling | 5.8 | 5.8 | – | – |
| CKM-suppr. background modelling | 1.0 | 1.0 | – | – |
| MC statistics | 1.5 | 1.5 | 1.7 | 1.5 |
| Total | 10.8 | 12.6 | 5.0 | 5.9 |
| $\mathcal{B}(D_s^+ \rightarrow \phi(K^+ K^-)\pi^+)$ | 5.9 | 5.9 | – | – |