

Systematic uncertainties for all observables, where values are quoted as a percentage of the statistical uncertainty for a given observable. The total uncertainty is given by the sum in quadrature of each contribution. PID refers to fixed PID efficiencies, PDF to fixed PDF parameters, Rates to fixed background contributions, Asym to the use of fixed detection asymmetries and background CP asymmetries, Eff to the use of fixed efficiencies from simulation, and Veto to the procedure used to veto fully reconstructed $B^- \rightarrow D^* h^-$ candidates.

Observable	PID	PDF	Rates	Asym	Eff	Veto	Total	
A_K^{CP}	6	10	11	5	1	10	16	
A_π^{CP}	4	14	15	70	3	10	74	
$A_K^{K\pi}$	12	7	11	49	1	10	52	
R^{CP}	24	88	58	0	16	10	109	
$R_{K/\pi}^{K\pi}$	47	243	104	1	402	10	483	
$R_{K^-}^{\pi K^-}$	2	48	30	3	2	10	57	
$R_{\pi^-}^{\pi K^-}$	2	41	15	13	4	10	46	
$R_{K^+}^{\pi K^+}$	3	47	23	2	6	10	53	
$R_{\pi^+}^{\pi K^+}$	2	44	15	15	6	10	50	
$A_K^{CP,\gamma}$	9	34	40	18	9	10	57	
A_K^{CP,π^0}	9	28	31	16	10	10	47	
$A_K^{K\pi,\gamma}$	4	8	14	15	2	10	22	
$A_K^{K\pi,\pi^0}$	9	12	19	34	5	10	42	
$R^{CP,\gamma}$	2	87	55	2	22	10	105	
R^{CP,π^0}	30	87	76	0	33	10	124	height
$R_{K/\pi}^{K\pi,\gamma/\pi^0}$	58	292	187	25	185	10	398	
$R_{K^-}^{\pi K,\gamma}$	13	117	82	14	21	10	146	
$R_{K^-}^{\pi K,\pi^0}$	4	39	48	4	22	10	66	
$R_{K^+}^{\pi K,\gamma}$	11	117	83	7	21	10	146	
$R_{K^+}^{\pi K,\pi^0}$	3	41	47	3	16	10	64	
$A_\pi^{CP,\gamma}$	2	18	39	11	3	10	45	
A_π^{CP,π^0}	2	16	16	31	3	10	39	
$A_\pi^{K\pi,\gamma}$	4	22	19	18	4	10	34	
$A_\pi^{K\pi,\pi^0}$	2	2	13	32	1	10	34	
$R_{\pi^-}^{\pi K,\gamma}$	13	114	57	11	6	10	128	
$R_{\pi^-}^{\pi K,\pi^0}$	1	86	60	16	15	10	107	
$R_{\pi^+}^{\pi K,\gamma}$	14	115	45	12	8	10	125	
$R_{\pi^+}^{\pi K,\pi^0}$	2	85	57	16	9	10	104	
$\mathcal{B}(D^{*0} \rightarrow D\pi^0)$	27	281	76	8	177	10	342	
$\mathcal{B}(B^\pm \rightarrow D^{*0}\pi^\pm)$	17	257	148	2	329	10	444	