

Table 1: Direct experimental measurements of  $\phi_s^{c\bar{c}s}$ ,  $\Delta\Gamma_s$  and  $\Gamma_s$  using  $B_s^0 \rightarrow J/\psi\phi$ ,  $J/\psi K^+K^-$ ,  $J/\psi\pi^+\pi^-$  and  $D_s^+D_s^-$  decays. Only the solution with  $\Delta\Gamma_s > 0$  is shown, since the two-fold ambiguity has been resolved in Ref. [1]. The first error is due to statistics, the second one to systematics. The last line gives our average.

Exp.	Mode	Dataset	$\phi_s^{c\bar{c}s}$	$\Delta\Gamma_s$ (ps <sup>-1</sup> )	Ref.
CDF	$J/\psi\phi$	9.6 fb <sup>-1</sup>	$[-0.60, +0.12]$ , 68% CL	$+0.068 \pm 0.026 \pm 0.009$	[2]
D0	$J/\psi\phi$	8.0 fb <sup>-1</sup>	$-0.55^{+0.38}_{-0.36}$	$+0.163^{+0.065}_{-0.064}$	[3]
ATLAS	$J/\psi\phi$	4.9 fb <sup>-1</sup>	$+0.12 \pm 0.25 \pm 0.05$	$+0.053 \pm 0.021 \pm 0.010$	[4]
ATLAS	$J/\psi\phi$	14.3 fb <sup>-1</sup>	$-0.119 \pm 0.088 \pm 0.036$	$+0.096 \pm 0.013 \pm 0.007$	[5] <sup>p</sup>
ATLAS	above 2 combined		$-0.094 \pm 0.083 \pm 0.033$	$+0.082 \pm 0.011 \pm 0.007$	[5] <sup>p</sup>
CMS	$J/\psi\phi$	20 fb <sup>-1</sup>	$-0.075 \pm 0.097 \pm 0.031$	$+0.095 \pm 0.013 \pm 0.007$	[6]
LHCb	$J/\psi K^+K^-$	3.0 fb <sup>-1</sup>	$-0.058 \pm 0.049 \pm 0.006$	$+0.0805 \pm 0.0091 \pm 0.0033$	[7]
LHCb	$J/\psi\pi^+\pi^-$	3.0 fb <sup>-1</sup>	$+0.070 \pm 0.068 \pm 0.008$	—	[8]
LHCb	above 2 combined		$-0.010 \pm 0.039$ (tot)	—	[7]
LHCb	$D_s^+D_s^-$	3.0 fb <sup>-1</sup>	$+0.02 \pm 0.17 \pm 0.02$	—	[9]
All combined			$-0.034 \pm 0.033$	$+0.084 \pm 0.007$	

<sup>p</sup> Preliminary.

## References

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