

**Erratum: QCD analysis of $B \rightarrow \pi\pi$ form factors
and the $|V_{ub}|$ extraction from B_{l4} decays
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The errors originate from a coding oversight, wherein the q^2 -factor was missed in the P - and F -wave contributions to the double-differential decay width in Eq. (7). This omission affects the numerical predictions for the partial branching fractions, which we correct in the updated Table I below. With this correction, we find improved agreement between our

TABLE I. Partial branching fractions $\Delta\mathcal{B}^i$ (in unit of 10^{-5}) with taking the PDG value of $|V_{ub}|$.

Bins	$\sqrt{s}$	q^2	$\Delta\mathcal{B}^i$	$\Delta\mathcal{B}^i$ [20]
1	$[4m_\pi^2, 0.6]$	$[0, 8]$	$0.30 \pm 0.03 \pm 0.06$	$0.84^{+0.39}_{-0.32} \pm 0.18$
2	$(0.6, 0.9]$	$[0, 4]$	$2.14 \pm 0.23 \pm 0.41$	$2.16^{+0.47}_{-0.42} \pm 0.23$
3	$(0.6, 0.9]$	$(4, 8]$	$2.01 \pm 0.21 \pm 0.35$	$2.63^{+0.53}_{-0.47} \pm 0.32$
4	$(0.9, 1.2]$	$[0, 4]$	$0.72 \pm 0.08 \pm 0.13$	$0.70^{+0.32}_{-0.25} \pm 0.20$
5	$(0.9, 1.2]$	$(4, 8]$	$0.48 \pm 0.04 \pm 0.09$	$0.64^{+0.28}_{-0.22} \pm 0.11$
6	$(1.2, 1.5]$	$[0, 4]$	$0.66 \pm 0.06 \pm 0.12$	$0.91^{+0.35}_{-0.28} \pm 0.12$
7	$(1.2, 1.5]$	$(4, 8]$	$0.20 \pm 0.02 \pm 0.02$	$0.72^{+0.32}_{-0.26} \pm 0.08$

predictions and the Belle data. All other results and the main conclusions of the paper remain unchanged.

Upon comparing the corrected predictions with our previous results, we observe notably better agreement in bins “2” and “4,” where the light cone sum rules (LCSRs) approach is expected to be most reliable and the $\pi\pi$ system is well understood. This improved consistency motivates a new extraction of the CKM matrix element $|V_{ub}|$. We obtain $(3.84 \pm 0.45 \pm 0.50) \times 10^{-3}$ and $(3.77 \pm 0.45 \pm 0.49) \times 10^{-3}$ in the ρ and f_0 regions of $\pi\pi$ invariant mass spectrum, respectively. These central values are in close agreement with the current world average, suggesting that future, more precise measurements of B_{l4} decays will be instrumental in further reducing the uncertainty in this fundamental parameter.

DATA AVAILABILITY

There are no publicly available research data or software supporting this manuscript. Requests for further information or data should be sent to the authors.