TABLE V: The correlation coefficients in the branching fraction measurements.

	$\tau^- \to$ $K^-\pi^+\pi^-\nu_\tau$	$\tau^- \to$ $K^-K^+\pi^-\nu_\tau$	$\tau^- \to$ $K^-K^+K^-\nu_\tau$
$\tau^- \to \pi^-\pi^+\pi^-\nu_\tau$	$+0.175$	$+0.049$	-0.053
$\tau^- \to K^-\pi^+\pi^-\nu_\tau$		$+0.080$	$+0.035$
$\tau^- \to K^-K^+\pi^-\nu_\tau$			-0.008

estimated:

$$\begin{aligned}
\mathcal{B}(\tau^- \to K^-\pi^+\pi^-\nu_\tau)/\mathcal{B}(\tau^- \to \pi^-\pi^+\pi^-\nu_\tau) &= (3.92 \pm 0.02^{+0.15}_{-0.16}) \times 10^{-2} \ , \\
\mathcal{B}(\tau^- \to K^-K^+\pi^-\nu_\tau)/\mathcal{B}(\tau^- \to \pi^-\pi^+\pi^-\nu_\tau) &= (1.84 \pm 0.01 \pm 0.05) \times 10^{-2} \ , \text{ and} \\
\mathcal{B}(\tau^- \to K^-K^+K^-\nu_\tau)/\mathcal{B}(\tau^- \to \pi^-\pi^+\pi^-\nu_\tau) &= (3.90 \pm 0.20^{+0.22}_{-0.23}) \times 10^{-4} \ ,
\end{aligned}$$

where the first and the second uncertainties are statistical and systematic, respectively.

DISCUSSION

The results of this analysis for the branching fractions of various three-prong modes are listed in Table VI together with recent results from BaBar [7]. Note that for the $\tau^- \to \pi^-\pi^+\pi^-\nu_\tau$ and $\tau^- \to K^-\pi^+\pi^-\nu_\tau$ modes, the branching fractions listed do not include any K^0 contribution.

TABLE VI: Comparison of the branching fraction results

Decay mode	BaBar	Belle
$\tau^- \to \pi^-\pi^+\pi^-\nu_\tau$, %	$8.83 \pm 0.01 \pm 0.13$	$8.42 \pm 0.00^{+0.26}_{-0.25}$
$\tau^- \to K^-\pi^+\pi^-\nu_\tau$, %	$0.273 \pm 0.002 \pm 0.009$	$0.330 \pm 0.001^{+0.016}_{-0.017}$
$\tau^- \to K^-K^+\pi^-\nu_\tau$, %	$0.1346 \pm 0.0010 \pm 0.0036$	$0.155 \pm 0.001^{+0.006}_{-0.005}$
$\tau^- \to K^-K^+K^-\nu_\tau$, 10^{-5}	$1.58 \pm 0.13 \pm 0.12$	$3.29 \pm 0.17^{+0.19}_{-0.20}$

In Fig. 11, our results are compared with the previous measurements. For all modes studied, the precision of the branching fractions for both BaBar and Belle is significantly