

Amplitude Analysis of $\tau^- \rightarrow \pi^- \pi^- \pi^+ \nu_\tau$ at Belle

Friday, September 27, 2024 9:00 AM (40 minutes)

We present a partial-wave analysis of $\tau^- \rightarrow \pi^- \pi^- \pi^+ \nu_\tau$ decays using the world's largest sample of these decays from the Belle experiment at KEK, Japan; and we discuss challenges of this analysis. We give preliminary results on light-meson resonances appearing in the $\pi^- \pi^- \pi^+$ system, including $a_1(1420)$, and in the $\pi^- \pi^+$ subsystem, measured using the so-called freed-isobar method; and we give prospects for spectroscopy measurements at Belle II.

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