

Partial-wave analysis of $\tau^- \rightarrow \pi^- \pi^- \pi^+ \nu_\tau$ at Belle

Thursday, 8 June 2023 15:15 (20 minutes)

I present preliminary results of a partial-wave analysis of $\tau^- \rightarrow \pi^- \pi^- \pi^+ \nu_\tau$ in data from the Belle experiment at the KEK e^+e^- collider. I demonstrate the presence of the $a_1(1420)$ and $a_1(1640)$ resonances in τ decay and measure their parameters. I also present validation of our findings using a model-independent approach. These results can improve modeling in simulation studies necessary for measuring the τ electric and magnetic dipole moments and Michel parameters.

Primary author: RABUSOV, Andrei (Technical University of Munich)

Presenter: RABUSOV, Andrei (Technical University of Munich)

Session Classification: Light meson spectroscopy

Track Classification: Light meson spectroscopy