

Light flavor vector mesons between 2 and 3 GeV at BESIII

Tuesday, 6 June 2023 14:00 (25 minutes)

At BESIII, the lineshapes of $e^+e^- \rightarrow \phi \eta'$, $\phi \eta$, KK , $\omega \pi^0$, $\eta \pi \pi$, $\omega \pi \pi$ are measured from 2.0 to 3.08 GeV, where resonant structures are observed in these processes. Multiple lineshapes of intermediate state are obtained by a partial wave analysis of $e^+e^- \rightarrow K^+ K^- \pi^0 \pi^0$, $K^+ K^- \pi^0$ and the structures observed provide essential input to understand the nature of $\phi(2170)$. These results provide important information for light flavor vector mesons i.e. excited ρ , ω and ϕ , for energy regions above 2 GeV.

Primary authors: LIU, Beijiang (Institute of High Energy Physics); LIU, Dong (Helmholtz Institute Mainz)

Presenter: LIU, Dong (Helmholtz Institute Mainz)

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