

## Light meson decays at BESIII

*Wednesday 27 September 2017 09:25 (20 minutes)*

At present the world's largest sample of 1.3 billion  $J/\psi$  events was accumulated at the BESIII detector, which provides a unique opportunity to investigate the  $\eta/\eta'$  decays via  $J/\psi$  radiative or hadronic decays. The  $\eta$  and  $\eta'$  hadronic decays are sensitive tools for investigations of  $\pi$ - $\pi$  and  $\eta$ - $\pi$  interactions, symmetry breaking, and serve as a test of Chiral Perturbation Theory. In recent years considerable results on  $\eta/\eta'$  decays were achieved at BESIII experiment. In this talk we present the significant progresses focusing on amplitude analyses of Dalitz decays (e.g.  $\eta' \rightarrow 3\pi$  PRL 118, 012001 (2017) ), observation new decay modes and search for rare/forbidden decays (e.g.  $\eta' \rightarrow \gamma\gamma\pi^0$ , arXiv: 1612.05721).

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