

## Dalitz plot analysis of three-body charmonium decays at BaBar

### Content

We perform Dalitz plot analyses of  $J/\psi$  three-body hadronic decays to  $\pi^+\pi^-\pi^0$ ,  $K^+K^-\pi^0$  and  $K_S^0K^\pm\pi^\mp$  using the isobar and Veneziano models. The  $J/\psi$  is produced through the Initial-State-Radiation process. We also perform Dalitz plot analyses of  $\eta_c$  three-body hadronic decays to  $K^+K^-\pi^0$  and  $K_S^0K^\pm\pi^\mp$ , where the  $\eta_c$  is produced in two-photon interactions. An isobar model is used, as well as a Model Independent Partial Wave Analysis which allows to extract the amplitude and phase of the  $K\pi$  S-wave up to a mass of 2.5 GeV.

### Summary

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