

# Meson production in initial-state radiation of $e^+e^-$ events at BABAR

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## Collaboration

BaBar

## Abstract content

The BaBar Collaboration has an intensive program studying the hadronic cross section at low-energy  $e^+e^-$  collisions, accessible at BaBar via initial-state radiation (ISR). These measurements allow significant improvements in the accuracy of the predicted value of the muon anomalous magnetic moment, which is necessary for shedding light on the current  $\sim 3.5$  sigma difference between prediction and experiment. A number of processes with two to six hadrons in final states have been published by BaBar. We report the results of recent studies on the reactions  $e^+e^- \rightarrow \pi^+\pi^-\pi^0\pi^0$ ,  $K_S K_L$ ,  $K_S K_L \pi^+\pi^-$ ,  $K_S K_S \pi^+\pi^-$ , and  $K^+K^-$  obtained via ISR. Number of intermediate states have been studied for the multi-hadron states as well as measurements of  $J/\psi$  branching fractions to these channels.

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