

# Measurement of the $e^+e^- \rightarrow \pi^+\pi^-\pi^0$ cross section in the centre-of-mass range 0.62 to 3.5 GeV at Belle II

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We report a measurement of the  $e^+e^- \rightarrow \pi^+\pi^-\pi^0$  cross section in the energy range from 0.62 GeV to 3.5 GeV using an initial-state radiation technique. We use an  $e^+e^-$  data sample corresponding to  $191 \text{ fb}^{-1}$  of integrated luminosity, collected at a centre-of-mass energy at or near the  $\Upsilon(4S)$  resonance with the Belle II detector at the SuperKEKB collider. The uncertainty at the  $\omega$  and  $\phi$  resonances is 2.2%. The leading order hadronic vacuum polarization contribution to the muon anomalous magnetic moment using this result is  $a_\mu^{3\pi} = (49.02 \pm 0.23 \pm 1.07) \times 10^{-10}$ .

## Alternate track

1. Beyond the Standard Model

## I read the instructions above

Yes

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