Contribution ID: **309** Type: **Parallel session talk**

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

Thursday 18 July 2024 11:30 (15 minutes)

We report a measurement of the $e^+e^- \to \pi^+\pi^-\pi^0$ 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 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 ω and ϕ 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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Session Classification: Quark and Lepton Flavour Physics

Track Classification: 05. Quark and Lepton Flavour Physics