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Tag and Probe technique tracking efficiency results at CMS

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The determination of the detector efficiency is a critical ingredient in any physics measurement. It can be in general estimated using simulations, but simulations need to be calibrated with data. The tag-and-probe method provides a useful and elegant mechanism for extracting efficiencies directly from data. In this work, we present the tracking performance measured in data where the tag-and-probe technique was applied to di-muon resonances for all reconstructed muon trajectories and the subset of trajectories in which the CMS Tracker is used to seed the measurement. The performance is assessed using LHC 2022 and 2023 Run 3 data at 13.6 TeV.

Alternate track

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Yes

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