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Track based alignment of the CMS muon detectors RYAN MUELLER, YURIY PAKHOTIN, ANTHONY ROSE, ALEXEI SAFONOV, TERUKI KAMON, Texas A&M Univ — The muon detectors of the CMS experiment provide fast trigger decisions, muon identifications and muon track measurements. The reconstruction performance of high momenta muons requires an accurate alignment of the CMS muon system and therefore this will be important for a range of physics analyses in Run 2 of the LHC. A track-based alignment procedure for the CMS muon chambers is presented. In addition to discussing the details of the alignment algorithm, the limitations of the muon alignment procedure are reported.

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