

Phenomenology 2023 Symposium



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Search for prompt production of a GeV scale resonance decaying to a pair of muons using data scouting at CMS

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Several BSM predicted particles could give rise to resonant particle pair production. We will present the results of a search for prompt low-mass dimuon resonances based on proton-proton collision data at a center-of-mass energy of 13 TeV collected by CMS. The search exploits a high-rate trigger ("scouting") stream to record events with two muons and looks for narrow peaks in the dimuon mass spectrum below 10 GeV.

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