

Observation of electroweak-induced $W^{\pm}W^{\pm}jj$ production

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I will discuss the CMS Collaboration's recently published observation of electroweak-induced $W^{\pm}W^{\pm}jj$ production using the channels in which the W bosons decay to electrons or muons and the 36 fb^{-1} of data collected in 2016 at a center-of-mass energy of 13 TeV. The observed significance is 5.5 standard deviations, compared to an expectation of 5.7 standard deviations. Additionally, the same signal region is used to set limits on anomalous quartic gauge couplings and on the vector boson fusion production cross section times branching ratio to $W^{\pm}W^{\pm}$ of doubly charged Higgs bosons in the Georgi-Macachek model.

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