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# Measurement of the WW production cross-section at 13.6TeV with the CMS experiment

We will present the recent measurements of opposite-sign WW production cross-section in proton-proton collisions at a center-of-mass energy of 13.6 TeV. The data used were collected by the CMS experiment in 2022 during Run3 of the LHC, corresponding to an integrated luminosity of 34.8 fb<sup>-1</sup>. The events were selected using leptonic decay channel by requiring one electron and one muon of opposite charge, and for the first time in proton-proton collisions, WW events with zero, one, and at least two jets were studied simultaneously and compared with theoretical predictions. Both inclusive cross-section measurement and, differential cross-section measurement as a function of the jet multiplicity in the event will be presented.

## Field of contribution

## Experiment

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**Track Classification:** Top Quark and EW physics