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## Measurement of the inclusive and differential Higgs boson production cross sections in the leptonic WW decay mode at $\sqrt{s} = 13$ TeV

*Tuesday 13 December 2022 12:00 (15 minutes)*

Measurements of fiducial inclusive and differential cross sections of Higgs boson production in p-p collisions are presented based on the data collected with the CMS detector, corresponding to an integrated luminosity of  $137 \text{ fb}^{-1}$  at a centre-of-mass energy of 13 TeV. The final state is considered where the Higgs boson decays to two W bosons, which subsequently decay to an electron, a muon, and a pair of neutrinos. The measured value of the integrated fiducial cross section is  $86.5 \pm 9.5 \text{ fb}$ , consistent with the standard model expectation of  $82.5 \pm 4.2 \text{ fb}$ .

### Session

Higgs Physics

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