

# Fiducial inclusive and differential Higgs boson cross sections at CMS

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The measurement of fiducial inclusive and differential Higgs boson cross sections allows the study of its properties under a minimal set of assumptions. By defining a fiducial phase-space, the uncertainties due to model dependence and extrapolations are minimized. A new, extended set of measurements performed using 35.9/fb of pp collisions collected by the CMS experiment at LHC in 2016 is presented. The measurements, obtained in the diphoton and ZZ decay channels, cover a wide range of differential observables, describing the kinematic properties of the Higgs boson, of its decay products and of particles produced in association with it. Fiducial measurements targeting individual production mechanisms are also presented.

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