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## Constraints on the Higgs boson width from off-shell production and decay to ZZ with the CMS detector

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Constraints on the total Higgs boson width,  $\Gamma_H$ , are presented using off-shell production and decay in the ZZ channel. The analysis is based on pp collision data collected at centre-of-mass energies of 7 and 8 TeV by the CMS experiment at the LHC, corresponding to integrated luminosities of 5/fb and 20/fb, respectively. The analyses are carried out in the ZZ to 4-lepton and to 2-lepton-2-neutrino channels, and constraints on the Higgs boson width are obtained.

### Summary

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