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Measurements of ZZ production in pp collisions at $sqrts$ = 13 TeV with the ATLAS detector.

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A study of Z-boson pair production at a centre-of-mass energy of $\sqrt{s}$ = 13 TeV is presented. The analysis uses 140 fb^{-1} of proton–proton collision data collected with the ATLAS detector. Both inclusive ZZ production and ZZ production in association with two jets ($ZZjj$) are considered. The final state is defined by one Z boson decaying into a pair of charged leptons and the other into a pair of neutrinos. Fiducial cross sections are measured for the ZZ and $ZZjj$ production processes. Differential cross sections are also measured for a wide range of kinematic observables. In addition, the inclusive ZZ cross section is extrapolated to the full phase space for Z bosons in the mass range 66–116 GeV. The results are found to be in good agreement with Standard Model predictions.

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