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Study of pp->ZZ->2l2v production using the full Run2 data with the ATLAS detector.

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This study presents an analysis of the ZZ->2l2v interaction using the full Run2 data of 139 fb-1 collected by the ATLAS detector at the LHC. The analysis includes a background estimation using a simultaneous fit method and a measurement of the cross section of the inclusive ZZ production, as well as in association with two jets, both differentially and inclusively. The ZZ->2l2v process is an important test of the electroweak sector of the Standard Model, and this study provides precise measurements of the production cross section and differential distributions for this process. The results are compared with theoretical predictions and can be used to constrain models beyond the Standard Model.

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