

Electron and photon energy measurement calibration with the ATLAS detector

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An accurate calibration of the energy measurement of electron and photon is needed for many ATLAS physics analyses. The calibration of the energy measurement is performed in-situ using a large statistics of $Z \rightarrow ee$ events. A pre-requisite of this calibration is a good understanding of the material in front of the calorimeter and of the inter-calibration of the different calorimeter layers. The $Z \rightarrow ee$ sample is also used to measure the energy resolution.

The results obtained with the pp collisions data at $\sqrt{s}=13$ TeV in 2015-2017 corresponding to an integrated luminosity of 80 fb⁻¹ are presented as well as the corresponding uncertainties on the electron and photon energy scales.

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