

# 31st International Symposium on Lepton Photon Interactions at High Energies



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## Luminosity determination in pp collisions at $\sqrt{s} = 13\text{TeV}$ with the ATLAS detector

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A precise measurement of the luminosity is a crucial input for many ATLAS physics analyses, and represents the leading uncertainty for W, Z and top cross-section measurements. The final ATLAS luminosity determination for the Run-2 13 TeV dataset is described, based on van der Meer scans during dedicated running periods each year to set the absolute scale, and an extrapolation to physics running conditions using complementary measurements from the ATLAS tracker and calorimeter subsystems. Nearly all aspects of the analysis have been revisited since the preliminary Run-2 calibration, leading to one of the most precise luminosity calibrations at a hadron collider to date.

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