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Luminosity determination with ALICE at the LHC

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Cross section measurements in hadronic collisions are crucial to the physics program of ALICE. These measurements require a precise knowledge of the luminosity delivered by the LHC. Luminosity determination in ALICE is based on the measurement of visible cross sections in dedicated calibration sessions, the van der Meer (vdM) scans. By combining information from the ALICE detectors and the LHC instrumentation, a per cent level of precision on luminosity can be achieved. This contribution presents a review of the ALICE luminosity determination methodology and results during the LHC Run 2. In particular, new results will be presented for pp collisions at $\sqrt{s}$=˜13˜TeV and for Pb-Pb collisions at $\sqrt{s_{\mathrm{NN}}}$=˜5.02˜TeV. The latter include a measurement of the inelastic hadronic interaction cross section.

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