

Measurements at LHC an their relevance for ultra-high energy cosmic rays

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Many LHC measurements have already been used to improve hadronic interaction models and thus lowered the model dependence of cosmic ray data analyses. However, the LHC still has a lot more potential to provide crucial information, which has not been fully exploited so far. Since the start of Run2 the highest accelerator beam energies are reached and no further increase can be expected for a long time. First data of Run2 are published and the fundamental performance of cosmic ray hadronic interaction models is scrutinized. The relevance of LHC data in general for cosmic ray data analyses is demonstrated. It is also shown in what aspects the current measurements are still incomplete and how they can be further improved.

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