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Data Processing at the Pierre Auger Observatory

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Cosmic rays of ultra-high energy (above 10^{18} eV) are very rare events and still of unknown origin. They provide a unique opportunity e.g. to study hadronic interactions at CMS energies more than one order of magnitude higher than it is achievable at LHC. The existence of the most energetic events (around 10^{20} eV) is theoretically very hard to

explain mostly because of the opacity of the Universe at these energies. The Pierre Auger Observatory combines surface and fluorescence detection techniques and it measures these particles already for ten years with the largest exposure ever. The computing tools developed for processing of Monte Carlo and measured data will be presented. A brief overview of selected scientific results will be also given.

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