

Auger-TA energy spectrum working group report

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The energy spectrum joint working group was re-established with membership from the Pierre Auger Observatory (Auger) and the Telescope Array experiment (TA). In-depth discussions on the energy determination and systematic uncertainties in the two experiments were made, resulting in a detailed comparison of the UHECR energy spectra observed in the southern and the northern hemispheres. The flux measured in the “overlapping region” in declination is of special interest to infer the differences of experimental origin. In this review, a special attention is given to i) the energy scale and the systematic uncertainties of the experiments, ii) the shape of the energy spectrum and the corresponding best fits, iii) the energy spectra in different declination bands, iv) a comparison of the Auger-TA spectra in the overlapping region, and v) the astrophysical interpretation of the results and possible links to anisotropy studies.

Presentation type

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Primary author: Dr VERZI, Valerio (INFN Roma Tor Vergata)

Co-authors: Dr SCHULZ, Alexander (Karlsruhe Institute of Technology); IKEDA, Daisuke (Institute for Cosmic Ray Research, University of Tokyo); IVANOV, Dmitri (University of Utah); SALAMIDA, Francesco (Institut de Physique Nucléaire d’Orsay); Prof. THOMSON, Gordon (University of Utah); SAGAWA, Hiroyuki (University of Tokyo); VALINO, Ines (University of Santiago de Compostela); Dr MARIS, Ioana (New York University); Dr LHENRY-YVON, Isabelle (Institut de Physique Nucléaire Orsay); ROTH, Markus (KIT); DELIGNY, Olivier (CNRS/IN2P3); ABUZAYYAD, Tareq (University of Utah); NONAKA, Toshiyuki (Institute for Cosmic Ray Research University of Tokyo); Dr TSUNESADA, Yoshiki (Osaka City University)

Presenter: Dr VERZI, Valerio (INFN Roma Tor Vergata)

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