## SciNeGHE 2016 High-energy gamma-ray experiments at the dawn of gravitational wave astronomy



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## Ground-based cosmic ray experiments: results and perspectives

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This report aims at giving a brief summary of the most recent results from air shower observations and discussing their relevance in the understanding of the origin, acceleration and propagation of the high energy cosmic rays.

The shape and composition of the primary spectrum as well as the large-scale anisotropy in the arrival direction of cosmic rays are key elements to understand their transition from a Galactic to an extra-Galactic origin, while at the highest energy the flux suppression may not be dominated by the GZK-effect but by the limiting energy of the sources.

The physics case for multimessenger observations and the observational results and challenges will be discussed.

We shall discuss the experimental progress in the field and its prospects for the very near future.

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