

# The UHECR Paradigm Shift

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Snowmass UHECR Workshop  
2021.10.20



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# Goal of this Section

*Discuss the shift in the UHECR paradigm over the last 2 decades via a review of the measurements from this generation of Observatories. Highlight some of the questions that still need to be explored.*

**Spectrum** - suppression near 70 EeV, additional spectral feature(s), ...

**Mass composition** - measurements of  $X_{\text{max}}$ , measurements of  $\ln A$ , ...

**Air shower physics** - muon-production depth, direct muon measurements, ...

**Anisotropy** - Extra-galactic dipole, phase transition, hot spots, potential correlations, ...

**Multi-messenger** - Targets of opportunity, GZK neutrinos, ...

The scope of this section is to cover only the measurements made by the current generation of experiments. Detailed discussions on the interpretation/theory will be covered in a later section.

# Science Tasks Related to this Section

Section will cover the science topics that we study in UHECR physics. We are asking for contributions to the following science tasks. Please contact the following people if you are interested!

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