

# Telescope Array Combined Fit to Cosmic Ray Spectrum and Composition

*Tuesday, July 13, 2021 7:18 PM (12 minutes)*

The cosmic rays observed at Earth have propagated through the universe over cosmological distances. The propagation should effect both the observed spectrum of cosmic rays and the abundance of different nuclear species that are observed at each energy. By performing a combined fit of Telescope Array spectrum and composition measurements to a simple source model consisting of a universal power-law with a rigidity dependent cutoff and variable, five-component composition fractions, one can constrain the possible sources of cosmic rays. We will present the results of such a fit using the Telescope Array surface array spectral measurements and the Telescope Array hybrid and stereo composition measurements.

## Keywords

CR composition, CR spectrum, CR source model, CR propagation model

## Collaboration

Telescope Array

## other Collaboration

## Subcategory

Experimental Results

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**Session Classification:** Discussion

**Track Classification:** Scientific Field: CRI | Cosmic Ray Indirect