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The TAx4 Experiment

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The Telescope Array (TA) experiment consists of a surface detector (SD) array covering 700 km^2 in area and three fluorescence detector (FD) stations and explores the origin of ultra-high-energy cosmic rays. We found the evidence of a hotspot in the arrival directions of cosmic rays with energies above 57 EeV (Abbasi *et al.* 2014). New SDs and FDs are planned to be constructed for the TA×4 experiment to cover 4 times larger area than TA to observe cosmic rays especially with the highest energies using high statistics. This project is expected to clarify not only the source of the hotspot but also the energy spectrum and the composition at the highest energies. The five-year proposal for TA×4 SD was accepted in the spring of 2015. The proposal for constructing 2 FD stations was also accepted in 2016. In this talk, the current status and the future prospects of the TA×4 experiment are shown.

Presentation type

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