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Type : **Poster**

TALE Stereo/Hybrid Analysis

Abstract content

we present results of a simulation study on the expected performance of the TA/TALE detector. In particular we look at the anticipated gains in aperture below $10^{18.5}$ eV which would result from the addition of the TALE detector to TA. We calculate the aperture at shower energies from 10^{17} up to 3×10^{20} for various detector combinations and observation modes: mono, stereo, hybrid-mono, and hybrid-stereo. We also perform event reconstruction of the simulated data and examine the results for energy and x_{\max} resolution, and the accuracy of the showers pointing direction determination. Above $1e19$ the stereo detector has complete coverage over the ground array which gives an unprecedented combination of large aperture and excellent angular resolution which will make TA/TALE a powerful tool in searching for point sources of ultrahigh energy cosmic rays.

If this papers is presented for a collaboration, please specify the collaboration

Telescope Array / HiRes

Summary

Reference

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