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## Imaging and non-imaging Cherenkov hybrid reconstruction

Saturday 1 August 2015 15:30 (1 hour)

Air showers with primary energies between 3 and 100 PeV which are pointed toward TALE give rise to an optical signal dominated by Cherenkov radiation rather than fluorescence light. The reconstruction of these showers can be greatly improved for a sample of these showers by placing a small (400 m square) array of non-imaging Cherenkov counters (25 counters) below the field of view of TALE. Estimates of the hybrid reconstruction resolutions for shower geometry, energy and X<sub>max</sub> are presented along with estimates of the hybrid aperture. NICHE counter designs and construction plans will be presented.

## Collaboration

Telescope Array

## Registration number following "ICRC2015-I/"

712

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