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The project of a ground-based wide-angle EAS Cherenkov light imaging detector for PCR mass composition study in the 1-1000 PeV energy range

This report presents a draft of a new detector designed to determine the chemical composition of primary cosmic rays based on the characteristics of the angular distribution of Cherenkov light from EAS. The installation, consisting of several such detectors, will be able to register individual EAS events in the energy range from 1 to 1000 PeV with high angular resolution of up to 0.3 degrees. The proposed detector's distinctive feature is its simple design and wide viewing angle of up to ± 30 degrees.

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