

Status of the SPHERE project for the high energy cosmic ray study by registering reflected Cherenkov light with a drone-borne detector

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Here we present the current status of the SPHERE project's new detector technical design. The SPHERE project is aimed at the primary cosmic ray studies in 1-1000 PeV energy range using the reflected Cherenkov light method. The concept is discussed of a drone mounted detector with a photosensitive camera based on silicon photomultipliers. The design details of a small scale prototype of such a detector is presented.

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