

PROJECT OF ANTARCTIC BALLOON-BORNE MEASUREMENTS OF THE CR SPECTRUM ABOVE 10^{20} EV.

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Relatively simple detector SPHERE (spherical mirror 1.5 m^2 with 100-pixels PMT mosaic) is proposed for the Antarctic balloon-borne measurements of the CR spectrum. Long time winter flight makes it possible to measure the spectrum above 10^{20} eV. Comparison with satellite and ISS projects of the nearest future shows that the efficiency of SPHERE detector is sufficiently high. The energy threshold will be about 10^{18} eV. The energy definition accuracy will be high enough because of simultaneous measurement of the EAS fluorescence track in the atmosphere and the full flux of the EAS Cherenkov light.