

BALLOON-BORNE MEASUREMENTS OF THE CR ENERGY SPECTRUM IN THE ENERGY RANGE $10^{16} - 10^{17}$ EV

R.A.Antonov (1), **D.V.Chernov** (1), E.E.Korosteleva (1), T.I.Sysojeva (2) and W.Tkaczyk (3)

(1) D.V.Skobel'tsyn Institute of Nuclear Physics of MSU, (2) P.N.Lebedev Physical Institute of RAS, (3) Department of Experimental Physics of University of Lodz.

`chr@dec1.sinp.msu.ru`

Preliminary results of the 2000 year measurements using balloon-borne detector SPHERE are presented. Detector was lifted by fastened balloon above snow field to 1km altitude. EAS Cherenkov light reflected from the snow was detected. Some indication of spectrum peculiarity near the energy $3-4 \cdot 10^{16}$ eV was obtained. The first attempt to estimate the Cherenkov light lateral distribution by means of this new method has been made.