ZENITH ANGLES DISTRIBUTIONS OF HADRONS AT MOUNTAIN ALTITUDE (600 G/SQ.CM) IN CORSIKA SIMULATIONS

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Zenith angles distributions of hadrons registered in the Pamir experiment have shown unexpected peak for small angles ($\theta \approx 7.5^o$).

Calculations simulating penetration of primary cosmic ray particles through the atmosphere to 600 g/cm^2 level (which corresponds to the Pamir experiment level 4370 m a.s.l.) have been made. Program CORSIKA with QGSJET model has been used.

In this paper distributions of zenith angles (θ) and of $\cos(\theta)$ have been shown for various types of hadrons, electrons and gamma quanta at mountain altitude.