

SPECTRA OF HADRONS AT MOUNTAIN ALTITUDE (600G/SQ.CM) AND THEIR RELATION WITH PRIMARY COSMIC RAY IN CORSIKA SIMULATIONS

J. Malinowski

Department of Experimental Physics, University of Lodz, ul.Pomorska 149/153,
90-236 Lodz, Poland.

malinow@krysia.uni.lodz.pl

Simulations of the nuclear electromagnetic cascades (NEC) development in the atmosphere initiated by primary cosmic ray particles have been calculated using CORSIKA program with QGSJET model. Spectra of hadrons at mountain altitude (4370 m a.s.l. - 600 g/cm²), corresponding with Pamir experiment registration level, have been analysed.

Efficiencies of production of secondary hadrons at the registration level have been estimated for different primary cosmic ray nuclei.

Analysis has been conducted, what range of E_o energy of primary particles gives hadron spectra observed at mountain altitude.