



Contribution ID: 64

Type: poster

Tunka-133: the First Results and Perspectives

Registration of EAS Cherenkov light at the new Tunka-133 array let us use the Earth atmosphere as a huge calorimeter for very high energy primary particles. The preliminary all particles energy spectrum in the range 6.10^{15} – 10^{18} eV is collected during two winter seasons since 2009 till 2011. The depth of EAS maximum X_{\max} for each event is derived from the measured steepness of the Cherenkov light lateral distribution function. The mean X_{\max} vs. primary energy in the range 6.10^{15} – 3.10^{17} eV and the analysis of X_{\max} distributions in the narrow energy bins are discussed. The Tunka-133 array was upgraded last year with 6 remote clusters enlarging the effective area to about 4 times. The perspectives of this new array version are presented.

Author: PROSIN, VASILY (S)

Presenter: PROSIN, VASILY (S)