

## EXPERIMENTAL EVIDENCES OF TWO COMPONENT MODEL FOR CR COMPOSITION AROUND THE “KNEE”.

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The  $N_e$  spectra for EAS and EAS with  $\gamma$ -families, received in experiment “Hadron” (Tien-Shan, 685 g/cm<sup>2</sup>), are compared. It is shown that EC (X-ray emulsion chamber) exposition together with EAS array is a new effective method for the CR composition determination around the knee. In particular it permits to divide an influence of the CR composition changing and a scaling violation in the nuclear interactions on a resulting intensity of the events at the mountain altitude. A model consisting of two CR components is suggested to explain the experimental data. A first component is a sum of many sources and second one can be connected with radiation of a single, close CR source. A phenomenological model gives a good fit for both  $N_e$  spectra (EAS and EAS with gamma-families) around the knee, is consistent with direct measurements of the nuclei energy spectra and supposes them break for magnetic rigidity  $R \simeq 0.13$  PeV. Besides an analysis of  $E_\gamma$  spectra in different  $N_e$  intervals shows that such simple model must be added by the additional, consisting mainly from the light nuclei, CR component which arises at energies  $E_0 \simeq 5 - 6$  PeV, i.e. beyond the EAS spectra break. The variants of the further model examinations are discussed.