

PCR nuclear composition at 1–30 PeV according to distributions of EAS electron-photon component at Tien-Shan

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Abstract. New data according to the primary cosmic ray nuclear composition derived from electron lateral distribution of extensive air shower dependence on electron size N_e from 5×10^5 to 5×10^7 at Tien-Shan are presented. Data were obtained for all EAS as well as for EAS accompanied by high energies gamma-rays and hadrons in X-ray films, generated by primary protons predominantly. Conclusions about the

part of protons and light nuclei at the region of 1–30 PeV primary energy before Ne spectrum “knee” and after that are drawn on the base of comparison with calculations.

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