

Abstract number: S4-450

4. High energy cosmic rays (HE-CR I)

### **Spectra of electrons, protons and alfa-particles according to measurements from the Pamela spectrometer**

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From the measurements made with Pamela spectrometer onboard of the satellite of Resurs DK-1 the spectra of electrons (electrons + positrons), protons and alfa-particles were obtained in a wide energy interval (70–1000 GeV). To select electrons from protons the neutron detector data have been used. The analysis of experimental data shows that the dependence of neutron number from electron and proton after their interaction in the calorimeter depends on the energy  $Q$  released in the calorimeter. For the same values of  $Q$  in nuclear cascade the neutron number is larger than in electromagnetic one. The selection of electron events from proton ones was carried out in 2 steps. The first, the selection was made with computer according to the set of some parameters. The second step included the visual inspection of each selected event. The use of these two methods gave us to carry out the selection of electrons with very high efficiency and to get the reliable spectra of particles.