

THE INFLUENCE OF NONTHERMAL ELECTRON DISTRIBUTIONS ON THE CHARGE STATE

Yu.Kartavykh (1) and V.Ostryakov (2)

(1) A.F.Ioffe Physical-Technical Institute, (2) St.Petersburg State Tech

We investigate the influence of non-thermal electron distributions on the formation of ionic states of heavy elements in SEP events. The equilibrium mean charges for several samples of non-Maxwellian background electrons (power law electron beam and bimaxwellian distributions) were calculated. According to our estimates the anomalously high densities of non-thermal electrons are required to obtain substantial difference in the charge states of heavy ions in comparison with thermal case.