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Particles dynamics and their non-thermal radiation in heterogeneous magnetosphere with variable magnetic fields

V. Kryvdyk
National Taras Shevchenko University of Kyiv, Ukraine (kryvdyk@univ.kiev.ua)

A particles dynamics and their non-thermal radiation in the magnetospheres of sky bodies with the heterogeneous particles distribution for the certain initial particles distribution in magnetosphere are investigated. It is shown that the charged particles will accelerate in the variable magnetic fields and they will generate the non-thermal electromagnetic radiation, and the sky body with variable magnetic fields must be the powerful sources of the non-thermal electromagnetic radiation, which can be observed by means of instruments on the Earth and on satellite. The values of the flux radiation depend on the distance to sky bodies, the value their magnetic fields and the particles spectrum in magnetosphere