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**A program package “Razryad”: modeling of plasma acceleration in pulsed-power systems.**

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Modeling of flows of electro-dynamic accelerated plasma created in experiments on modern powerful generators of terra-Watt and multi-terra-Watt level of power is an intensively developing domain of the numerical radiation plasma-dynamics. Numerical analysis on the base of MHD-models of plasma flows is used for solution of different technical problems. The article consists of two parts. In the first part a base formulation and general description of the program package “RAZRYAD” (in English – MARPLE - Magnetically Accelerated Radiative Plasmas – Lagrangian-Eulerian) is presented. The second part is connected with analysis of a perspective scheme of the electro-generator power amplification by a method of magnetic plasma compression.

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