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Three dimensional Particle-in-Cell simulation of blob transport¹ SEIJI ISHIGURO, Theory and Computer Simulation Center, National Institute for Fusion Science — Three dimensional particle in cell (PIC) simulation code for investigation of dynamic plasma behavior in a scrape-off-layer in magnetic fusion devices is developed. Particle absorbing boundaries corresponding to diverter plates and first walls are introduced. Non-uniform external magnetic field is also applied. Initially a blob is placed in the system. Charge separation due to Grad B drift and blob transport across the magnetic field due to EXB drift are investigated by using this PIC code.

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