Abstract Submitted
for the DPP15 Meeting of
The American Physical Society

Kinetic Modeling of Divertor Plasma[1] SEIJI ISHIGURO, HIROKI HASEGAWA, National Institute for Fusion Science and the Graduate University for Advanced Studies (SOKENDAI), THEERASARN PIANPANIT, The Graduate University for Advanced Studies (SOKENDAI) — Particle-in-Cell (PIC) simulation with the Monte Carlo collisions and the cumulative scattering angle coulomb collision can present kinetic dynamics of divertor plasmas. We are developing two types of PIC codes. The first one is the three dimensional bounded PIC code where three dimensional kinetic dynamics of blob is studied and current flow structures related to sheath formation are unveiled.[2,3] The second one is the one spatial three velocity space dimensional (1D3V) PIC code with the Monte Carlo collisions where formation of detach plasma is studied.[4] First target of our research is to construct self-consistent full kinetic simulation modeling of the linear divertor simulation experiments.

[1]This work is performed with the support and under the auspices of NIFS Collaboration Research program (NIFS15KNSS059, NIFS14KNXN279, and NIFS13KNSS038) and the Research Cooperation Program on Hierarchy and Holism in Natural Science at NINS.
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Date submitted: 24 Jul 2015 Electronic form version 1.4