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N-body numerical simulation of particle transport in the presence of background magnetic field YASUTARO NISHIMURA, National Cheng Kung University — Coulomb collisional process and Debye shielding is investigated in the presence of external magnetic field employing N-body numerical simulation. Conventional Debye shielding can be prevented when the electron Larmor radius becomes comparable or smaller than the Debye length. Ambipolar diffusion, both in the parallel and the perpendicular direction is examined.

<sup>2</sup>C.P.Wang and Y.Nishimura, IEEE Transactions on Plasma Science, 47, 1196 (2019).

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 $<sup>^{1}</sup>$ Taiwan MOST 107-2112-M-006-013