

**Two-dimensional particle simulation of a perpendicular shock in a shock rest frame**

# Masahiro Yamao[1]; Takayuki Umeda[1]; Ryo Yamazaki[2]; Tatsuki Ogino[1]

[1] STEL, Nagoya Univ.; [2] none

The full kinetic dynamics of a perpendicular collisionless shock is studied by means of a two-dimensional electromagnetic full particle simulation. The present simulation domain is taken in the shock rest frame in contrast to the previous full particle simulations of shocks. Our two-dimensional simulation shows the same reformation cycle as the one-dimensional simulation.