

## The structure of slow shocks in the geomagnetotail

L.-N. HAU

Institute of Space Science, National Central University, Jhungli, Taiwan R.O.C.

The steady magnetic reconnection model proposed by Petschek [1964] involves two pairs of slow shocks that play the role of accelerating plasma by reducing the magnetic field. There have been some observational evidences for the existence of slow shocks in the geomagnetotail through the comparison between the MHD jump conditions with the satellite plasma and magnetic field data. In this study we examine the structure of slow shocks based on the resistive/viscous Hall-MHD model. In particular, linear fixed-point analysis is performed for the upstream and downstream states of the observed slow shock cases and the shock structures are then calculated from the numerical integration of the nonlinear isotropic Hall-MHD equations. The effects of pressure anisotropy on the slow shock structures will also be discussed.