

# BIFURCATION OF JOVIAN MAGNETOTAIL CURRENT SHEET

**P. L. Israelevich and A. I. Ershkovich**

*Department of Geophysics and Planetary Sciences, The Raymond and Beverly Sackler Faculty of Exact Sciences, Tel Aviv University, Ramat Aviv, Israel*

Multiple crossings of the magnetotail current sheet by a single spacecraft give possibility to distinguish between two types of electric current density distribution: single-peaked (Harris type current layer) and double-peaked (bifurcated current sheet). Magnetic field measurements in Jovian magnetic tail by *Voyager-2* reveal the bifurcation of tail current sheet. Electric current density possesses minimum at the point of  $B_x$ -component reversal and two maxima at the distance where the magnetic field strength reaches 50% of its value in the tail lobe.