Meeting: 1005, Newark, Delaware, SS 4A, Special Session on Asymptotic Behavior of Evolution Equations

Shuhong He and Ping Wang* (pxw10@psu.edu), Department of Mathematics, 200 University Drive, Schuylkill Haven, PA 17972. Long time behavior of flow in magnetic field within the Earth. In this paper we study the equations governing flows in magnetic field within the earth. By establishing a priori estimates for the solutions of the differential system and applying Sell's idea, we show that the weak solutions of the equations on bounded, smooth three-dimensional domain have a global attractor. (Received August 05, 2004)