## On free boundary problems of magnetohydrodynamics

VSEVOLOD SOLONNIKOV Steklov Mathematical Institute, St.-Petersburg, Russia solonnik@pdmi.ras.ru

We prove local in time solvability of free boundary problem of magnetohydrodynamics of a viscous incompressible liquid assuming that the domain filled with the liquid can be multi-connected. Under some additional assumptions, the solution can be extended to the infinite time interval t>0.