

## MAGNETOHYDRODYNAMIC INSTABILITY ON CONCAVE WALL OF TOKAMAK LIQUID DIVERTOR

*An idea of the Liquid Lithium Divertor has been proposed many years ago and has been realized at National Spherical Torus Experiment [1]. The liquid metal of divertor moves permanently to provide a material recycling and a shape of the divertor is curved to repeat the geometrical features of the confinement magnetic field. In such a way there are the necessary conditions for development of Görtler instability. Görtler instability develops in the boundary-layer flow over a concave surface. Originally the instability is hydrodynamic one, but the magnetic field changes its features essentially. The Görtler vortices exist and can be identified when the liquid flows are not laminar anymore and don't reach a turbulent regime which seems to be described numerically only. Formation and development of the Görtler vortices are studied by analytical and numerical approaches.*

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