L. Shapakidze

A. Razmadze Mathematical Institute, Georgian Academy of Sciences Tbilisi, Georgia

THE EFFECT OF A TRANSVERSE PRESSURE GRADIENT ON THE STABILITY OF FLOW BETWEEN TWO PERMEABLE CYLINDERS

Secondary regimes arising after the loss of stability of flow between rotating permeable cylinders in the presence of transversal pressure gradient are studied.

It is stated that after the loss of stability of the main flow, depending both on the pressure gradient and on radial Reynold's number, there may take place either rotating-symmetrical stationary flows, or three-dimensional autooscillations with different period in azimuthal direction.