

Effect of Heat Transfer on Magnetohydrodynamic Axisymmetric Flow Between Two Stretching Sheets

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Z. Naturforsch. **65a**, 961 – 968 (2010); received October 21, 2009 / revised January 10, 2010

This investigation describes the effects of heat transfer on magnetohydrodynamic (MHD) axisymmetric flow of a viscous fluid between two radially stretching sheets. Navier-Stokes equations are transformed into the ordinary differential equations by utilizing similarity variables. Solution computations are presented by using the homotopy analysis method. The convergence of obtained solutions is checked. Skin friction coefficient and Nusselt number are given in tabular form. The dimensionless velocities and temperature are also analyzed for the pertinent parameters entering into the problem.

Key words: Heat Transfer; Porous Medium; Skin Friction Coefficient; Nusselt Number.