

# Flow by a Porous Shrinking Surface in a Rotating Frame

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We derive series solution of a nonlinear problem which models the magnetohydrodynamic (MHD) shrinking flow due to a porous plate in a rotating frame of reference. The governing partial differential equations are first converted into ordinary differential equations and then solved by homotopy analysis method. The convergence of the derived series solution is carefully analyzed. Graphical results are presented to examine the role of various interesting parameters.

*Key words:* Rotating Frame; Homotopy Analysis Solution; Shrinking Flow.