

SPLINE SOLUTION OF A BOUNDARY LAYER FLOW WITH THERMAL RADIATION PAST A MOVING VERTICAL POROUS PLATE

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Abstract

In this paper we analyse the boundary layer flow through a moving vertical porous plate with thermal radiation. The momentum and energy equations for the particular flow are obtained by using similarity transformation. The resulting differential equations are solved by spline collocation method. The results in the form of velocity profiles, temperature profiles, local wall shear stress and wall heat transfer rate are obtained for various parameter involved in the problem.

Key Words : Vertical Porous plate, Boundary layer flow, Thermal radiation, Cubic spline collocation method.

2000 Mathematics Subject Classification : 76D10, 76M55, 65M70.