

## Heat Transfer Effects in a non-Newtonian Fluid With Partial Slip

The objectives of the study are to analyze steady, two-dimensional laminar free convective boundary layer flows of non-Newtonian fluid over different geometries viz. horizontal circular cylinder, sphere etc., embedded in a Darcy or non-Darcy porous medium with partial slip. The analysis includes: (1) formation of the mathematical models to obtain the governing boundary layer flow and heat transfer equations for the new models; (2) non similar boundary layer transformation; and (3) numerical computation using a finite-difference scheme. The scheme employed is the Box method developed by Keller.

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