

## Documents

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**Magnetohydrodynamics boundary layer slip casson fluid flow over a dissipated stretched cylinder**

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**Abstract**

Magnetohydrodynamics (MHD) boundary layer slip Casson fluid flow over a dissipated moving cylinder is explored. Casson fluid model is employed as a non-Newtonian material that demonstrates the phenomenon of yield stress. Blood material is considered to be an example of Casson liquid. The non-linear partial differential quantities are transformed into expressions of ordinary derivatives through transformation of similarity variables. These equations are computed for numeric solutions by using Runge-Kutta method along with shooting scheme. The impact of pertinent constraints on the fluid velocity and temperature are examined through graphs. The coefficient of the skin friction and the rate of heat transfer are found numerically. Comparing of the present study with the earlier results is also presented. We observed that the coefficient of skin friction increases for higher values of Hartmann number. © 2019 Trans Tech Publications Ltd, Switzerland

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