

Faculty of Exact and Natural Sciences

Doctoral Program: Mathematics

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Integral method for approximate solution of problem movement in the boundary layer of a non-Newtonian conducting fluid.

Abstract:

The paper is concerned with the unsteady boundary layer of a non-Newtonian fluid. electrical conductivity of the fluid is constant, or changes as follows

$$\sigma = \sigma_0 \left(1 - \frac{u}{U_\infty}\right).$$

Received values for the velocity of the fluid, for the thickness of the dynamic boundary layer and for the coefficient of friction.