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MHD forced convective flow past a vertical plate : An automated solution approach (Conference Paper)

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Abstract

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The forced convection flow in incompressible viscous fluid past a vertical plate is investigated with the effect of magnetic field. The governing equations are solved numerically using automated solution technique which is FEniCS. It is shown that the increasing of magnetic field strength lead to decrease the velocity but increase the temperature for cooled plate. Meanwhile for heated plate, increasing magnetic field strength lead to decrease the velocity and the temperature of the fluid. © 2018 Author(s).

SciVal Topic Prominence

Topic: Magnetohydrodynamics | Stretching | Shooting technique

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automated solution technique, forced convection, magnetic field, vertical plate

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