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K. S. Subrahmanian Moosath and K. Fazeela

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Abstract: This article is an outcome of a detailed study of momentum maps of symplectic actions. Results in this area are reorganized and presented in a systematic way. This work is of an expository nature. Convexity results for compact group actions on non compact manifolds with proper momentum maps is discussed in detail. Necessary and sufficient topological conditions for the momentum map to be open onto its image and results on local convexity and local polyhedral structure of the image of the momentum map of a torus action is also discussed. Non-abelian analogues of certain results are also given. Cylinder valued momentum map and other generalizations of the standard momentum map due to Alan Weinstein and Guillemin and Sternberg are discussed.

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Hemant Kumar Nashine

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Abstract: The aim of this paper is to study ordered partial metric spaces and establish new coincidence and common fixed point results for a pair of maps satisfying weakly contractive condition. To illustrate our results, we equip the paper with example.

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M. O. Olatinwo

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N. Ahmed

MHD TRANSIENT FLOW PAST A SUDDENLY ACCELERATED INFINITE
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Abstract: This paper deals with an exact solution to the problem of an MHD viscous, incompressible free convective flow of an electrically conducting, Newtonian non-Gray fluid past a suddenly but temporarily accelerated infinite vertical plate with ramped wall temperature in presence of appreciable radiation heat transfer and uniform transverse magnetic field .

The fluid is assumed to be optically thin and the magnetic Reynolds number is considered small enough to neglect the induced hydromagnetic effects. The resulting system of the equations governing the flow is solved by adopting Laplace transform technique in closed form. The influence of Stuart number (square of Hartmann number), radiation conduction parameter Q , Reynolds number Re and time t on the variations in the fluid velocity, fluid temperature, and skin friction and Nusselt number at the plate are demonstrated graphically. The results show that the imposition of the transverse magnetic field or high radiation retards the fluid motion and causes the viscous drag at the plate to fall. The investigation simulates that the fluid temperature drops and the rate of heat transfer from the plate to the fluids gets increased for increasing Reynolds number as well as radiation parameter.
