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UNSTEADY MHD NANOFLUID FLOW OVER PERMEABLE SPINNING EXPANDING DISK WITH THE FOCUS ON MULTIPLE SLIP CONDITIONS

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ABSTRACT

Here we are going to research heat and mass exchange capacity of unsteady Magneto hydrodynamic nanofluid stream streaming over a porous spinning and rotating disk. Different convective conditions are mulled over at the limit of the stream. The usage of similarity transformation has been considered to change over the suit of partial differential equations in the numerical model portraying the stream into a bunch of ordinary differential equations alongside the appropriate boundary conditions. The authors considered the revolution and extending of the disk and portrayed the outcomes acquired in two conditions like extending and no extending disk through proper graphs. After the exhausting examination of the stream, it is discovered that the presence of expanding plate lifts the impacts of heat convection factor, nanoparticle volume fraction convection factor, Prandtl number and stretching disk factor on the heat and mass exchange qualities of the stream proficiently. As needs be, the heat and mass exchange pace of the stream at the stream surface are essentially expanded in presence of suction and no suction in the flow.