

AN INTRODUCTION TO NAVIER-STOKES EQUATIONS

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Thursday 2PM, October 18, 2018

In this talk, I will begin with a introduction to the basic equations of fluid mechanics including the continuity equation and the Navier-Stokes equations. I will give a complete description and derivation of the Navier-Stokes' equations.

Navier-Stokes equations are important for understanding behavior of fluids in various domains and are also useful for the study the atmospheric/ocean currents. I will discuss the governing equations for the problem of magneto-hydrodynamic free convection flows with thermal memory over a moving vertical plate in porous medium.

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