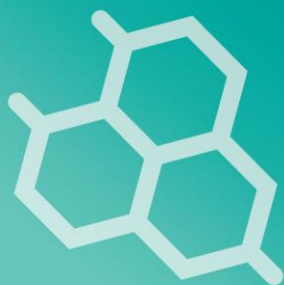


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LAGRANGIAN FORMULATION OF NAVIER-STOKES EQUATIONS OF MOTIONS FOR THE SURFACE WAVES IN TWO-LAYERED FLUIDS

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ABSTRACT

Depending on the specific situations, there are various types of equations can be employed to describe fluid flows. There are two kinds for describing the physical governing equations, the Navier-Stokes equations and Lagrangian equation. The Navier-Stokes description is a spatial description. On the other hand, Lagrangian description is a material description. The main focus is to highlight some important points for solving Navier-Stokes equations and its applications on different branches of fluid mechanics. Lagrangian formulations of Navier-Stokes equations for two layers of different densities subject to gravity force for irrotational, incompressible fluids are formulated.



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