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| Nota di bibliografia | Includes bibliographical references. |
| Nota di contenuto | On the weak and variational entropy solutions for the steady Navier-Stokes-Fourier system with Dirichlet boundary condition for the temperature -- Stability estimates for a viscous incompressible flow past a rigid body with time-dependent motion -- Existence and regularity of a magnetohydrodynamic system with Navier-type boundary conditions in 2-D -- On asymptotic stability of Boussinesq equations -- Controllability of one dimensional Burgers-particle interaction model -- Optimal control for two-dimensional Navier-Stokes equations with slippage -- Asymptotic behavior of the Navier-Stokes type problem -- On an approach to the global well-posedness of quasilinear parabolic- hyperbolic coupled system in unbounded domains. |
| Sommario/riassunto | This volume presents state-of-the-art developments in theoretical and applied fluid mechanics. Chapters are based on lectures given at a workshop in the summer school Fluids under Control, held in Prague on August 25, 2021. Readers will find a thorough analysis of current research topics, presented by leading experts in their respective fields. Specific topics covered include: Magnetohydrodynamic systems The |

steady Navier-Stokes-Fourier system Boussinesq equations Fluid-structure-acoustic interactions Fluids under Control will be a valuable resource for students interested in mathematical fluid mechanics.