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Soggetti	Mathematical physics Partial differential equations Functional analysis Fluids Fluid mechanics Mathematical Applications in the Physical Sciences Partial Differential Equations Functional Analysis Fluid- and Aerodynamics Engineering Fluid Dynamics
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	Primitive Equations for Oceanic and Atmospheric Dynamics -- Viscous Compressible Flows under Pressure -- Global Well-posedness for Incompressible-Incompressible Two Phase Problem -- The Role of Pressure in the Theory of Weak Solutions to the Navier-Stokes Equations -- Pressure Dependent Material Coefficients -- FE Pressure Stabilizations for Incompressible Flow Problems -- Finite-Volume Methods for Navier-Stokes Equations.
Sommario/riassunto	This contributed volume is based on talks given at the August 2016 summer school "Fluids Under Pressure," held in Prague as part of the "Prague-Sum" series. Written by experts in their respective fields, chapters explore the complex role that pressure plays in physics, mathematical modeling, and fluid flow analysis. Specific topics covered include: Oceanic and atmospheric dynamics Incompressible flows

Viscous compressible flows Well-posedness of the Navier-Stokes equations Weak solutions to the Navier-Stokes equations Fluids Under Pressure will be a valuable resource for graduate students and researchers studying fluid flow dynamics.

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