1. Record Nr. UNISA996466701503316

Titolo Macroscopic Modelling of Turbulent Flows [[electronic resource]]:

Proceedings of a Workshop held at INRIA, Sophia-Antipolis, France, December 10–14, 1984 / / edited by Uriel Frisch, Joseph B. Keller,

George C. Papanicolaou, Olivier Pironneau

Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer,

, 1985

ISBN 3-540-39520-2

Edizione [1st ed. 1985.]

Descrizione fisica 1 online resource (X, 363 p. 240 illus.)

Collana Lecture Notes in Physics, , 0075-8450 ; ; 230

Disciplina 532

533.62

Soggetti Fluids

Fluid mechanics

Fluid- and Aerodynamics Engineering Fluid Dynamics

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Note generali Bibliographic Level Mode of Issuance: Monograph

Nota di contenuto Homogenization and visco-elasticity of turbulence -- Sedimentation of

a random dilute suspension -- Remarks on oscillations and Stokes' equation -- Large and small structures in the computation of transition to fully developed turbulent flows -- Eddy viscosity subgrid scale models for homogeneous turbulence -- Blow-up in the Navier-Stokes and Euler equations -- Large eddy simulations of turbulence in physical space analysis of spectral energy transfer -- Vortex stability and inertial-range cascades -- A stochastic subgrid model for sheared turbulence -- Some challenges for modelling of turbulence and internal waves in stably stratified fluids -- Numerical simulation of

homogeneous turbulence -- Time-dependent rayleigh-benard convection in low prandtl number fluids -- Spectral closures to derive a subgrid scale modeling for large eddy simulations -- Modelling of three-dimensional shock wave turbulent boundary layer interactions -- Numerical and theoretical study of different flow regimes occurring in horizontal fluid layers, differentially heated -- Rotating turbulence evolving freely from an initial quasi 2D state -- Quasi-geostrophic

turbulence and the mesoscale variability -- Small-scale atmospheric turbulence and its interaction with larger-scale flows -- Self-turbulizing flame fronts -- Simulation as an aid to phenomenological modeling -- Weak limits of semilinear hyperbolic systems with oscillating data -- Large scale oscillatory instability for systems with translational and galilean invariances -- The Kuramoto-Sivashinsky equation : A caricature of hydrodynamic turbulence ? -- Computation of a dimension for a model of fury developed turbulence -- Pattern formation by particles settling in viscous flows -- Liapounov exponents for the Kuramoto-Sivashinsky model -- Vortices and vortex-couples in two-dimensional turbulence long-lived couples are batchelor's couples -- Numerical simulation of decaying two-dimensional turbulence: Comparison between general periodic and Taylor-Green like flows.