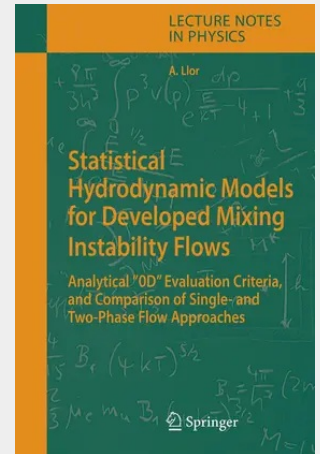


Statistical Hydrodynamic Models for Developed Mixing Instability Flows

Analytical "0D" Evaluation Criteria, and Comparison of Single- and Two-Phase Flow Approaches

Part textbook, part exploratory work, this book aims to raise the awareness of students, physicists, and engineers in turbulence on the modeling of gravitationally induced turbulent mixing flows as produced, for instance, by Rayleigh-Taylor instabilities. The discussion is centered on the differences between single-fluid and two-fluid approaches, and it is illustrated with a 0D analysis of two specific elementary models in common use. Important deviations are shown to appear on many features, among others the prominence of directed energy, the simultaneous restitution of test cases, the responses to variable acceleration and shocks, and the behavior of various length scales.

Part textbook, part exploratory work, this book aims to raise the awareness of students, physicists, and engineers in turbulence on the modeling of gravitationally induced turbulent mixing flows as produced, for instance, by Rayleigh-Taylor instabilities. The discussion is centered on the differences between single-fluid and two-fluid approaches, and it is illustrated with a 0D analysis of two specific elementary models in common use. Important deviations are shown to appear on many features, among others the prominence of directed energy, the simultaneous restitution of test cases, the responses to variable acceleration and shocks, and the behavior of various length scales.



53,45 €

49,95 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9783540283300

Medium: Buch

ISBN: 978-3-540-28330-0

Verlag: Springer

Erscheinungstermin: 23.12.2005

Sprache(n): Englisch

Auflage: Erscheinungsjahr 2005

Serie: Lecture Notes in Physics

Produktform: Gebunden

Gewicht: 910 g

Seiten: 152

Format (B x H): 155 x 235 mm

