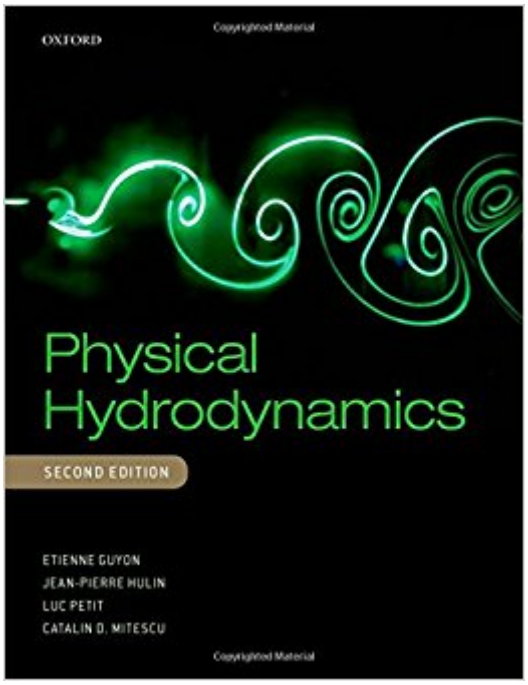
# Physical Hydrodynamics



## Synopsis

This second edition of Physical Hydrodynamics is a deeply enriched version of a classical textbook on fluid dynamics. It retains the same pedagogical spirit, based on the authors' experience of teaching university students in the physical sciences, and emphasizes an experimental (inductive) approach rather than the more formal approach found in many textbooks in the field.A new edition was necessary as contact between the mechanics and physics approaches and their communities has increased continuously over the last few decades. Today the field is more widely open to other experimental sciences: materials, environmental, life, and earth sciences, as well as the engineering sciences. Representative examples from these fields have been included where possible, while retaining a general presentation in each case. This book should be useful for researchers and engineers in these various fields.Images have an essential place in fluid mechanics, and the illustrations in this edition have been completely revisited and widely improved. An inset of colour photographs is provided to stimulate the interest of readers. Exercises have also been added at the end of a number of chapters.

## Book Information

Paperback: 544 pages

Publisher: Oxford University Press; 2 edition (March 29, 2015)

Language: English

ISBN-10: 0198702450

ISBN-13: 978-0198702450

Product Dimensions: 9.6 x 1.1 x 7.5 inches

Shipping Weight: 2.6 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars 3 customer reviews

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## Customer Reviews

This book is essential reading for all people interested in the modern study of fluids and hydrodynamics, from undergraduates to graduate research students and professors. The book provides a comprehensive and up-to-date description of the behaviour and theory of fluids with excellent examples drawn from real life that illustrate the principles. Covering a large range of topics

relating the hydrodynamics observed in the real world to our mathematical descriptions, the derivations throughout are developed with a rare clarity accompanied with proofs and key explanations. Importantly for those new to the topic, the physical meaning of all terms in the mathematical description are described articulately throughout. With examples including the latest state-of-the-art knowledge of fluids and their behaviour, this book should sit on the desk of all people interested and active in hydrodynamics Benedict Rogers, University of Manchester, UK

Etienne Guyon, ESPCI,Jean-Pierre Hulin, Laboratoire FAST,Luc Petit, Universite Claude Bernard-Lyon 1,Catalin D. Mitescu, Pomona College, Claremont, California

Very clear and structured approach to hydrodynamics. Easy to follow and understand

The best Hydrodynamics book I've found yet. Nice pictures, basics and explanations.

My favorite book on fluid mechanics, definitely for physicists. Perhaps a tad less rigorous than other classics like the Kundu & Cohen, but definitely more engaging and presenting current areas of research. A lot of analogies with other fields of Physics, nice pictures, and a general feel that the authors love this stuff.A chapter on soft matter and one on stat mech applied to fluid dynamics could be added. Although they are not quite relevant to classical fluid dynamics, my experience is that physicists who study fluids are often versed in these fields, and would be happy to include those in their course.

the Hip (Clinics in Physical Therapy) Student Laboratory Manual for Seidel's Guide to Physical Examination, 8e (MOSBY'S GUIDE TO PHYSICAL EXAMINATION STUDENT WORKBOOK) Young People's Voices in Physical Education and Youth Sport (Routledge Studies in Physical Education and Youth Sport) Seidel's Guide to Physical Examination, 8e (Mosby's Guide to Physical Examination) Seidel's Guide to Physical Examination - E-Book (Mosby's Guide to Physical Examination) Textbook of Physical Diagnosis: History and Examination With STUDENT CONSULT Online Access, 7e (Textbook of Physical Diagnosis (Swartz)) Bates' Nursing Guide to Physical Examination and History Taking (Guide to Physical Exam & History Taking (Bates))