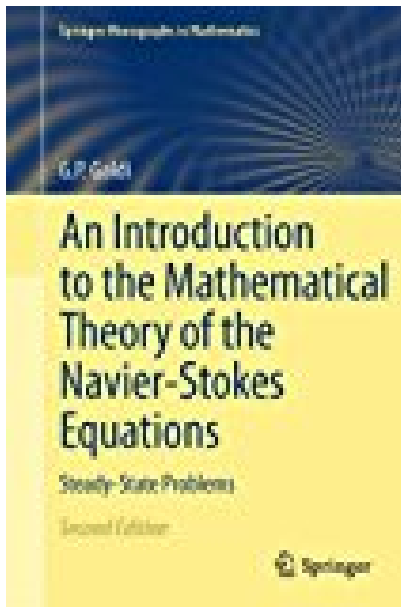


An Introduction to the Mathematical Theory of the Navier-Stokes Equations Steady-State Problems

Springer Monographs in Mathematics



BOOK DETAILS

- Author : Giovanni Galdi
- Pages : 1018 Pages
- Publisher : Springer
- Language : English
- ISBN : 0387096191

[↓ DOWNLOAD](#)

BOOK SYNOPSIS

The book provides a comprehensive, detailed and self-contained treatment of the fundamental mathematical properties of boundary-value problems related to the Navier-Stokes equations. These properties include existence, uniqueness and regularity of solutions in bounded as well as unbounded domains. Whenever the domain is unbounded, the asymptotic behavior of solutions is also investigated. This book is the new edition of the original two volume book, under the same title, published in 1994. In this new edition, the two volumes have merged into one and two more chapters on steady generalized oseen flow in exterior domains and steady Navier-Stokes flow in three-dimensional exterior domains have been added. Most of the proofs given in the previous edition were also updated. An introductory first chapter describes all relevant questions treated in the book and lists and motivates a number of significant and still open questions. It is written in an expository style so as to be accessible also to non-specialists. Each chapter is preceded by a substantial, preliminary discussion of the problems treated, along with their motivation and the strategy used to solve them. Also, each chapter ends with a section dedicated to alternative approaches and procedures, as well as historical notes. The book contains more than 400 stimulating exercises, at different levels of difficulty, that will help the junior researcher and the graduate student to gradually become accustomed with the subject. Finally, the book is endowed with a vast bibliography that includes more than 500 items. Each item brings a reference to the section of the book where it is cited. The book will be useful to researchers and graduate students in mathematics in particular mathematical fluid mechanics and differential equations. Review of First Edition, First Volume: "The emphasis of this book is on an introduction to the mathematical theory of the stationary Navier-Stokes equations. It is written in the style of a textbook and is essentially self-contained. The problems are presented clearly and in an accessible manner. Every chapter begins with a good introductory discussion of the problems considered, and ends with interesting notes on different approaches developed in the literature. Further, stimulating exercises are proposed. (Mathematical Reviews, 1995)

AN INTRODUCTION TO THE MATHEMATICAL THEORY OF THE NAVIER-STOKES EQUATIONS STEADY-STATE PROBLEMS SPRINGER

MONOGRAPHS IN MATHEMATICS - Are you looking for Ebook An Introduction To The Mathematical Theory Of The Navier-Stokes Equations Steady-State Problems Springer Monographs In Mathematics ? You will be glad to know that right now An Introduction To The Mathematical Theory Of The Navier-Stokes Equations Steady-State Problems Springer Monographs In Mathematics is available on our online library. With our online resources, you can find Applied Numerical Methods With Matlab Solution Manual 3rd Edition or just about any type of ebooks, for any type of product.

Best of all, they are entirely free to find, use and download, so there is no cost or stress at all. An Introduction To The Mathematical Theory Of The Navier-Stokes Equations Steady-State Problems Springer Monographs In Mathematics may not make exciting reading, but Applied Numerical Methods With Matlab Solution Manual 3rd Edition is packed with valuable instructions, information and warnings. We also have many ebooks and user guide is also related with An Introduction To The Mathematical Theory Of The Navier-Stokes Equations Steady-State Problems Springer Monographs In Mathematics and many other ebooks.

We have made it easy for you to find a PDF Ebooks without any digging. And by having access to our ebooks online or by storing it on your computer, you have convenient answers with An Introduction To The Mathematical Theory Of The Navier-Stokes Equations Steady-State Problems Springer Monographs In Mathematics . To get started finding An Introduction To The Mathematical Theory Of The Navier-Stokes Equations Steady-State Problems Springer Monographs In Mathematics , you are right to find our website which has a comprehensive collection of manuals listed.