Mathematical Models of Fluid Dynamics
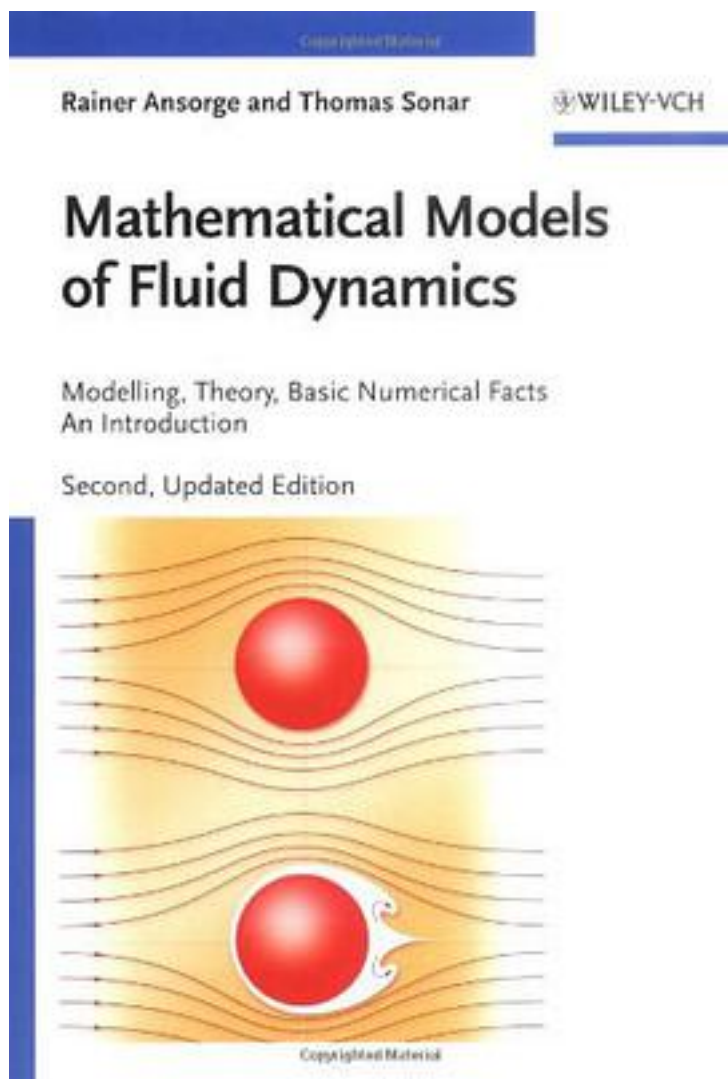
Mathematical Models of Fluid Dynamics_下载链接1_

著者:Ansorge, Rainer/ Sonar, Thomas

出版者:

出版时间:2009-9

装帧:

isbn:9783527407743

Without sacrificing scientific strictness, this introduction to the field guides readers through mathematical modeling, the theoretical treatment of the underlying physical laws and the construction and effective use of numerical procedures to describe the behavior of the dynamics of physical flow.

The book is carefully divided into three main parts:

- The design of mathematical models of physical fluid flow;

- A theoretical treatment of the equations representing the model, as Navier-Stokes, Euler, and boundary layer equations, models of turbulence, in order to gain qualitative as well as quantitative insights into the processes of flow events;

- The construction and effective use of numerical procedures in order to find quantitative descriptions of concrete physical or technical fluid flow situations.

Both students and experts wanting to control or predict the behavior of fluid flows by theoretical and computational fluid dynamics will benefit from this combination of all relevant aspects in one handy volume.

作者介绍:

目录:

[Mathematical Models of Fluid Dynamics_下载链接1_](#)

标签

评论

[Mathematical Models of Fluid Dynamics_下载链接1_](#)

书评

[Mathematical Models of Fluid Dynamics_下载链接1_](#)