1. **Record Nr.**   UNINA9910155380003321

   Titolo   Mathematical Fluid Dynamics, Present and Future : Tokyo, Japan, November 2014 / / edited by Yoshihiro Shibata, Yukihito Suzuki

   Pubbl/distr/stampa   Tokyo : , : Springer Japan : , : Imprint : Springer, , 2016

   Edizione   [1st ed. 2016.]

   Descrizione fisica   1 online resource (XIX, 613 p. 86 illus., 49 illus. in color.)

   Collana   Springer Proceedings in Mathematics & Statistics, , 2194-1009 ; ; 183

   Disciplina   532.05

   Soggetti   Partial differential equations
   Fluid mechanics
   Mathematical physics
   Partial Differential Equations
   Engineering Fluid Dynamics
   Mathematical Applications in the Physical Sciences

   Lingua di pubblicazione   Inglese

   Formato   Materiale a stampa

   Livello bibliografico   Monografia

   Nota di bibliografia   Includes bibliographical references at the end of each chapters.

   Sommario/riassunto   This volume presents original papers ranging from an experimental study on cavitation jets to an up-to-date mathematical analysis of the Navier-Stokes equations for free boundary problems, reflecting topics featured at the International Conference on Mathematical Fluid Dynamics, Present and Future, held 11–14 November 2014 at Waseda University in Tokyo. The contributions address subjects in one- and two-phase fluid flows, including cavitation, liquid crystal flows, plasma flows, and blood flows. Written by internationally respected experts, these papers highlight the connections between mathematical, experimental, and computational fluid dynamics. The book is aimed at a wide readership in mathematics and engineering, including researchers and graduate students interested in mathematical fluid dynamics.