Record Nr. UNINA9910300384303321 Turbulence and Interactions: Proceedings of the TI 2012 conference // **Titolo** edited by Michel O. Deville, Jean-Luc Estivalezes, Vincent Gleize, Thien-Hiep Lê, Marc Terracol, Stéphane Vincent Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa **ISBN** 3-662-43489-X Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (196 p.) Collana Notes on Numerical Fluid Mechanics and Multidisciplinary Design, , 1612-2909;;125 532.0527 Disciplina Soggetti Continuum physics Computational complexity Computer simulation Classical and Continuum Physics Complexity Simulation and Modeling Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index at the end of each chapters. From the Contents: Thermal Boundary Layer Instabilities In Near Critical Nota di contenuto Fluids -- Penalty Methods For Turbulent Flows Interacting With Obstacles -- Direct Numerical Simulation Of Particle Turbulence Interaction In Forced Turbulence -- Wake Instabilities Behind An Axisymmetric Bluff Body At Low Reynolds Numbers. The book presents a snapshot of the state-of-art in the field of Sommario/riassunto turbulence modeling and covers the latest developments concerning direct numerical simulations, large eddy simulations, compressible turbulence, coherent structures, two-phase flow simulation, and other related topics. It provides readers with a comprehensive review of both theory and applications, describing in detail the authors' own experimental results. The book is based on the proceedings of the third Turbulence and Interactions Conference (TI 2012), which was held on June 11-14 in La Saline-les-Bains, La Réunion, France, and includes

both keynote lectures and outstanding contributed papers presented at

the conference. This multifaceted collection, which reflects the conference's emphasis on the interplay of theory, experiments and computing in the process of understanding and predicting the physics of complex flows and solving related engineering problems, offers a practice-oriented guide for students, researchers and professionals in the field of computational fluid dynamics, turbulence modeling and related areas.