

1. Record Nr.	UNINA9910824887203321
Autore	Sagaut Pierre <1967->
Titolo	Multiscale and multiresolution approaches in turbulence / / Pierre Sagaut, Sebastien Deck, Marc Terracol
Pubbl/distr/stampa	London, : Imperial College Press, c2006
ISBN	1-281-86733-0 9786611867331 1-86094-897-9
Edizione	[1st ed.]
Descrizione fisica	1 online resource (356 p.)
Altri autori (Persone)	DeckSebastien TerracolMarc
Disciplina	532.0527
Soggetti	Turbulence - Mathematical models Fluid dynamics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. A brief introduction to turbulence -- 2. Turbulence simulation and scale separation -- 3. Statistical multiscale modeling -- 4. Multiscale subgrid models : self-adaptivity -- 5. Structural multiscale subgrid models : small scale estimations -- 6. Unsteady turbulence simulation on self-adaptive grids -- 7. Global hybrid RANS/LES methods -- 8. Zonal RANS/LES methods.
Sommario/riassunto	"This unique book gives a general unified presentation of the use of the multiscale/multiresolution approaches in the field of turbulence. The coverage ranges from statistical models developed for engineering purposes to multiresolution algorithms for the direct computation of turbulence. It provides the only available up-to-date reviews dealing with the latest and most advanced turbulence models (including LES, VLES, hybrid RANS/LES, DES) and numerical strategies. The book aims at providing the reader with a comprehensive description of modern strategies for turbulent flow simulation, ranging from turbulence modeling to the most advanced multilevel numerical methods."