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Titolo	Progress in Turbulence VIII : Proceedings of the iTi Conference in Turbulence 2018 // edited by Ramis Örlü, Alessandro Talamelli, Joachim Peinke, Martin Oberlack
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Descrizione fisica	1 online resource (348 pages)
Collana	Springer Proceedings in Physics, , 1867-4941 ; ; 226
Disciplina	620.1064 532.0527
Soggetti	Dynamics Nonlinear theories Nonlinear Optics Fluid mechanics Multibody systems Vibration Mechanics, Applied Continuum mechanics Differential equations Applied Dynamical Systems Engineering Fluid Dynamics Multibody Systems and Mechanical Vibrations Continuum Mechanics Differential Equations
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Inter-scale energy transfer in a multi-scale flow -- Three-dimensional global stability on Stuart vortex of free shear layer -- Near-wall turbulence in a localized puff in a pipe -- Reduced description and modelling of small-scale turbulence by means of a tensorial turbulent viscosity -- Symmetry-Based Turbulence Modeling -- Development of a linear mode in a turbulent boundary layer -- Spanwise organisation

of buffer layer coherent structures -- Shear/buoyancy interaction in wall bounded turbulent flows -- Logarithmic behaviour of wall-attached structures in wall-bounded turbulent flows -- Law of the wall and law of the wake in turbulent parallel flow -- Large-scale energy in turbulent boundary layers: Reynolds-number and pressure-gradient effects -- Identifying the wall signature of large-scale motions with extended POD -- Roughness and Reynolds number effects on the flow past a rough-to-smooth step change -- Flow dynamics in the roughness sublayer of atmospheric boundary layers -- Convection velocities in turbulent boundary layers over rough surfaces -- Influence of upstream perturbations on wall heat transfer via large-scale motions -- Turbulence production in the low polymer drag reduction regime.

Sommario/riassunto

This volume collects the edited and reviewed contributions presented in the 8th iTi Conference on Turbulence, held in Bertinoro, Italy, in September 2018. In keeping with the spirit of the conference, the book was produced afterwards, so that the authors had the opportunity to incorporate comments and discussions raised during the event. The respective contributions, which address both fundamental and applied aspects of turbulence, have been structured according to the following main topics: I Theory II Wall-bounded flows III Simulations and modelling IV Experiments V Miscellaneous topics VI Wind energy.