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Note generali	"Contributions from participants of the second WALLTURB workshop on "Understanding and modelling of wall turbulence" held in Lille (France) from June 18 to 20, 2014"--Preface.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	On the Size of the Eddies in the Outer Turbulent Wall Layer: Evidence from Velocity Spectra -- Sensitized-RANS Modelling of Turbulence: Resolving Turbulence Unsteadiness by a (Near-wall) Reynolds Stress Model -- Coherent Structures in Wall-bounded Turbulence -- Attached Eddies and High-order Statistics -- DNS of Turbulent Boundary Layers in the Quasi-laminarization Process -- Numerical ABL Wind Tunnel Simulations with Direct Modeling of Roughness Elements through Immersed Boundary Condition Method -- Three-dimensional Nature of 2D Hairpin Packet Signatures in a DNS of a Turbulent Boundary Layer -- Wall Pressure Signature in Compressible Turbulent Boundary Layers -- Three-dimensional Structure of Pressure-Velocity Correlations in a Turbulent Boundary Layer -- Computation of Complex Terrain Turbulent Flows Using Hybrid Algebraic Structure-based Models (ASBM) and LES.

Sommario/riassunto

This is the proceedings of the ERCOFTAC Workshop on Progress in Wall Turbulence: Understanding and Modelling, that was held in Lille, France from June 18 to 20, 2014. The workshop brought together world specialists of near wall turbulence and stimulated exchanges between them around up-to-date theories, experiments, simulations and numerical models. This book contains a coherent collection of recent results on near wall turbulence including theory, new experiments, DNS, and modeling with RANS, LES. The fact that both physical understanding and modeling by different approaches are addressed by the best specialists in a single workshop is original.
