1. Record Nr. UNICAMPANIAVAN0026278

Autore	Trentin, Guglielmo
Titolo	Insegnare e apprendere in rete / Guglielmo Trentin
Pubbl/distr/stampa	Bologna, : Zanichelli, 1998
ISBN	88-08-09767-6
Descrizione fisica	XI, 252 p. : ill. ; 21 cm.
Disciplina	371.334467
Soggetti	Internet <rete di elaboratori> - Impiego didattico
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910855368703321

Autore	Ornea Liviu
Titolo	Principles of Locally Conformally Kähler Geometry / / by Liviu Ornea, Misha Verbitsky
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Birkhäuser, , 2024
ISBN	3-031-58120-2
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (729 pages)
Collana	Progress in Mathematics, , 2296-505X ; ; 354
Altri autori (Persone)	VerbitskiiMisha <1969->
Disciplina	516.36
Soggetti	Geometry, Differential Geometry, Algebraic Functions of complex variables Differential Geometry Algebraic Geometry Several Complex Variables and Analytic Spaces
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

Nota di contenuto

Introduction -- Part I: Lectures in locally conformally Kähler geometry -- Kähler manifolds -- Connections in vector bundles and the Froebenius theorem -- Locally conformally Kahler manifolds -- Hodge theory on complex manifolds and Vaisman's theorem -- Holomorphic vector bundles -- CR, Contact and Sasakian manifolds -- Vaisman manifolds -- The structure of compact Vaisman manifolds -- Orbifolds -- Quasi-regular foliations -- Regular and quasi-regular Vaisman manifolds -- LCK manifolds with potential -- Embedding LCK manifolds with potential in Hopf manifolds -- Logarithms and algebraic cones -- Pseudoconvex shells and LCK metrics on Hopf manifolds -- Embedding theorem for Vaisman manifolds -- Non-linear Hopf manifolds -- Morse-Novikov and Bott-Chern cohomology of LCK manifolds -- Existence of positive potentials -- Holomorphic S^1 actions on LCK manifolds -- Sasakian submanifolds in algebraic cones -- Oeljeklaus-Toma manifolds -- Appendices -- Part II: Advanced LCK geometry -- Non-Kähler elliptic surfaces -- Kodaira classification for non-Kähler complex surfaces -- Cohomology of holomorphic bundles on Hopf manifolds -- Mall bundles and flat connections on Hopf manifolds -- Kuranishi and Teichmüller spaces for LCK manifolds with potential -- The set of Lee classes on LCK manifolds with potential -- Harmonic forms on Sasakian and Vaisman manifolds -- Dolbeault cohomology of LCK manifolds with potential -- Calabi-Yau theorem for Vaisman manifolds -- Holomorphic tensor fields on LCK manifolds with potential -- Part III: Topics in locally conformally Kähler geometry -- Twisted Hamiltonian actions and LCK reduction -- Elliptic curves on Vaisman manifolds -- Submersions and bimeromorphic maps of LCK manifolds -- Bott-Chern cohomology of LCK manifolds with potential -- Hopf surfaces in LCK manifolds with potential -- Riemannian geometry of LCK manifolds -- Einstein-Weyl manifolds and the Futaki invariant -- LCK structures on homogeneous manifolds -- LCK structures on nilmanifolds and solvmanifolds -- Explicit LCK metrics on Inoue surfaces -- More on Oeljeklaus-Toma manifolds -- Locally conformally parallel and non-parallel structures -- Open questions.

Sommario/riassunto

This monograph introduces readers to locally conformally Kähler (LCK) geometry and provides an extensive overview of the most current results. A rapidly developing area in complex geometry dealing with non-Kähler manifolds, LCK geometry has strong links to many other areas of mathematics, including algebraic geometry, topology, and complex analysis. The authors emphasize these connections to create a unified and rigorous treatment of the subject suitable for both students and researchers. Part I builds the necessary foundations for those approaching LCK geometry for the first time with full, mostly self-contained proofs and also covers material often omitted from textbooks, such as contact and Sasakian geometry, orbifolds, Ehresmann connections, and foliation theory. More advanced topics are then treated in Part II, including non-Kähler elliptic surfaces, cohomology of holomorphic vector bundles on Hopf manifolds, Kuranishi and Teichmüller spaces for LCK manifolds with potential, and harmonic forms on Sasakian and Vaisman manifolds. Each chapter in Parts I and II begins with motivation and historic context for the topics explored and includes numerous exercises for further exploration of important topics. Part III surveys the current research on LCK geometry, describing advances on topics such as automorphism groups on LCK manifolds, twisted Hamiltonian actions and LCK reduction, Einstein-Weyl manifolds and the Futaki invariant, and LCK geometry on nilmanifolds and on solvmanifolds. New proofs of many results are given using the methods developed earlier in the text. The text then concludes with a chapter that gathers over 100 open problems, with

context and remarks provided where possible, to inspire future research. .