

1. Record Nr.	UNINA9910877124903321
Autore	Akivis M. A (Maks Aizikovich)
Titolo	Conformal differential geometry and its generalizations // Maks A. Akivis, Vladislav V. Goldberg
Pubbl/distr/stampa	New York, : Wiley, c1996
ISBN	1-283-28111-2 9786613281111 1-118-03263-2 1-118-03088-5
Descrizione fisica	1 online resource (404 p.)
Collana	Pure and applied mathematics
Altri autori (Persone)	GoldbergV. V (Vladislav Viktorovich)
Disciplina	516.3/63
Soggetti	Geometry, Differential
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"A Wiley-Interscience publication."
Nota di bibliografia	Includes bibliographical references (p. 323-354) and indexes.
Nota di contenuto	Conformal Differential Geometry and Its Generalizations; Contents; Introduction; CHAPTER 1 CONFORMAL AND PSEUDOCONFORMAL SPACES; 1.1 Conformal transformations and conformal spaces; 1.2 Moving frames in a conformal space; 1.3 Pseudoconformal spaces; 1.4 Examples of pseudoconformal spaces; Notes; CHAPTER 2 HYPERSURFACES IN CONFORMAL SPACES; 2.1 Fundamental objects and tensors of a hypersurface; 2.2 Invariant normalization of hypersurfaces; 2.3 The rigidity theorem and the fundamental theorem; 2.4 Curvature lines of a hypersurface; 2.5 Geometric problems connected with the tensor c_{ij} ; Notes CHAPTER 3 SUBMANIFOLDS IN CONFORMAL AND PSEUDOCONFORMAL SPACES3.1 Geometry of a submanifold in a conformal space; 3.2 Submanifolds carrying a net of curvature lines; 3.3 Submanifolds in a pseudoconformal space; 3.4 Line submanifolds of a three-dimensional projective space; Notes; CHAPTER 4 CONFORMAL STRUCTURES ON A DIFFERENTIABLE MANIFOLD; 4.1 A manifold with a conformal structure; 4.2 Weyl connections and Riemannian metrics compatible with a conformal structure; 4.3 A conformal structure on submanifolds of a conformal space; 4.4 A conformal structure on a hypersurface of a projective space NotesCHAPTER 5 THE FOUR-DIMENSIONAL CONFORMAL STRUCTURES;

5.1 Structure equations of the $CO(2, 2)$ -structure; 5.2 The $(70(1, 3))$ -structure and the $CO(4, 0)$ -structure; 5.3 The Hodge operator; 5.4 Completely isotropic submanifolds of four-dimensional conformal structures; 5.5 Four-dimensional webs and $CO(2, 2)$ -structures; 5.6 Conformal structures of some metrics in general relativity; 5.7 Conformal structures on a four-dimensional hypersurface; Notes; CHAPTER 6 GEOMETRY OF THE GRASSMANN MANIFOLD; 6.1 Analytic geometry of the Grassmannian and the Grassmann mapping 6.2 Geometry of the Grassmannian $G(l, 4)$ 6.3 Differential geometry of the Grassmannian; 6.4 Submanifolds of the Grassmannian $G(m, n)$; 6.5 Normalization of the Grassmann manifold; 6.6 Homogeneous normalization of the Grassmann manifold; Notes; CHAPTER 7 MANIFOLDS ENDOWED WITH ALMOST GRASSMANN STRUCTURES; 7.1 Almost Grassmann structures on a differentiable manifold; 7.2 Structure equations and torsion tensor of an almost Grassmann manifold; 7.3 The complete structure object of an almost Grassmann manifold; 7.4 Manifolds endowed with semiintegrable almost Grassmann structures 7.5 Multidimensional $[p + l]$ -webs and almost Grassmann structures associated with them 7.6 Grassmann $(p + l)$ -webs; 7.7 Transversally geodesic and isoclinic $(p + l)$ -webs; 7.8 Grassmannizable d -webs; Notes; Bibliography; Symbols Frequently Used; Author Index; Subject Index

Sommario/riassunto

Comprehensive coverage of the foundations, applications, recent developments, and future of conformal differential geometry Conformal Differential Geometry and Its Generalizations is the first and only text that systematically presents the foundations and manifestations of conformal differential geometry. It offers the first unified presentation of the subject, which was established more than a century ago. The text is divided into seven chapters, each containing figures, formulas, and historical and bibliographical notes, while numerous examples elucidate the necessary theory.C
