

## References

- [Abe73] Abe, K.: Applications of a Riccati type differential equation to Riemannian manifolds with totally geodesic distributions, *Tôhoku Math. J.*, **25**, 425–444 (1973).
- [Abe85] Abe, N.: General connections on vector bundles, *Kodai Math. J.*, **8**, 322–329 (1985).
- [Art75] Artin, E.: *Geometric Algebra*, Interscience Publishers, New York (1975).
- [Asa85] Asanov, G.S.: *Finsler Geometry, Relativity and Gauge Theories*, D. Reidel Publish. Comp., Dordrecht (1985).
- [AM55] Auslander, L. and Marcus, L.: Holonomy of flat affinely connected manifolds, *Annals of Math.*, **62** (1), 139–151 (1955).
- [BBI98] Bădițoiu, G., Buchner, K. and Ianuș, S.: Some remarkable connections and semi-Riemannian submersions, *Bull. Math. Soc. Sci. Math. Roumanie*, **48** (89), No. 3, 153–169 (1998).
- [BCU81] Barros, M., Chen, B.Y. and Urbano, F.: Quaternion  $CR$ -submanifolds of quaternion manifolds, *Kodai Math. J.*, **4**, 399–418 (1981).
- [B78] Bejancu, A.:  $CR$ -Submanifolds of a Kähler manifold, I, *Proc. Amer. Math. Soc.*, **69**, 134–142 (1978).
- [B86a] Bejancu, A.: *Geometry of  $CR$ -Submanifolds*, D. Reidel Publ. Comp., Dordrecht (1986).
- [B86b] Bejancu, A.:  $QR$ -Submanifolds of quaternion Kählerian manifolds, *Chinese J. Math.*, **14**, No. 2, 81–94 (1986).
- [B88] Bejancu, A.: Foundations of direction-dependent gauge theories, *Mechanics Seminar Timișoara (Romania)*, No. 13, 1988, 60 pages.
- [B89] Bejancu, A.: Generalized gauge theory, *Colloquia Math. Soc. J. Bolyai*, **56**, *Differential Geometry*, Eger, 101–126 (1989).
- [B96] Bejancu, A.: Geometry of degenerate hypersurfaces, *Arab J. Math. Sc.*, **2**, 1–38 (1996).
- [BF00a] Bejancu, A. and Farran, H.R.: *Geometry of Pseudo-Finsler Submanifolds*, Kluwer Acad. Publ., Dordrecht (2000).
- [BF00b] Bejancu, A. and Farran, H.R.: A geometric characterization of Finsler manifolds of constant curvature  $k = 1$ , *Internat. J. Math. and Math. Sci.*, **23** (7), 1–9 (2000).
- [BF02] Bejancu, A. and Farran, H.R.: Finsler metrics of positive constant flag curvature on Sasakian space forms, *Hokkaido Math. J.*, **31** (2), 459–468 (2002).

- [BF03a] Bejancu, A. and Farran, H.R.: Structural and transversal geometry of foliations, *Internat. J. Pure and Appl. Math.*, **9**, No. 4, 419–450 (2003).
- [BF03b] Bejancu, A. and Farran, H.R.: Lightlike foliations of codimension one, *Publ. Math. Debrecen*, **62**, f. 3-4, 325–336 (2003).
- [BF03c] Bejancu, A. and Farran, H.R.: Randers manifolds of positive constant curvature, *Internat. J. Math. and Math. Sci.*, **26** (18), 1155–1165 (2003).
- [BF05] Bejancu, A. and Farran, H.R.: On the geometry of semi-Riemannian distributions, to appear in *Anal. Univ. "Al.I. Cuza" Iași*.
- [BO87] Bejancu, A. and Otsuki, T.: General Finsler connections on a Finsler vector bundle, *Kodai Math. J.*, **10**, 143–152 (1987).
- [BP81] Bejancu, A. and Papaghiuc, N.: Semi-invariant submanifolds of a Sasakian manifold, *An. St. Univ. "Al.I. Cuza" Iași*, **27**, 163–170 (1981).
- [Ber60] Bernard, D.: Sur la géométrie différentielle des  $G$ -structures, *Ann. Inst. Fourier (Grenoble)*, **10**, 151–270 (1960).
- [Ber01] Berndt, R.: *An Introduction to Symplectic Geometry*, Amer. Math. Soc., Providence, Graduate Studies in Math., Vol. **26** (2001).
- [Be87] Besse, A.L.: *Einstein Manifolds*, Springer-Verlag, Berlin (1987).
- [Bla76] Blair, D.E.: *Contact Manifolds in Riemannian Geometry*, Lecture Notes in Math., **509**, Springer-Verlag, Berlin (1976).
- [Bla01] Blair, D.E.: *Riemannian Geometry of Contact and Symplectic Manifolds*, Birkhäuser, Basel (2001).
- [BC79] Blair, D.E. and Chen, B.Y.: On  $CR$ -submanifolds of Hermitian manifolds, *Israel J. Math.*, **34**, 353–363 (1979).
- [BKP95] Blair, D.E., Koufogiorgos, T., Papantoniou, B.J.: Contact metric manifolds satisfying a nullity condition, *Israel J. Math.*, **91**, 189–214 (1995).
- [BC70] Brickell, F. and Clark, R.S.: *Differentiable Manifolds, An Introduction*, Van Nostrand, New York, (1970).
- [BW86] Brito, G.B. and Walczak, P.G.: Totally geodesic foliations with integrable normal bundles, *Bol. Soc. Bras. Mat.*, **17**, 41–46 (1986).
- [Cai90] Cairns, G.: Totally umbilic Riemannian foliations, *Michigan Math. J.*, **37**, 145–159 (1990).
- [CN85] Camacho, C. and Neto, A.L.: *Geometric Theory of Foliations*, Progress in Math., Birkhäuser, Boston (1985).
- [CC03] Candel, A. and Conlon, L.: *Foliations, I and II*, Graduate Studies in Math., Vol. **23** and Vol. **60**, Amer. Math. Soc., Providence, Rhode Island (2000) and (2003).
- [Car81] Carrière, Y.: *Flots riemanniens et feuilletages géodésibles de codimension un*, Thèse Université des Sciences et Techniques de Lille, (1981).
- [CN84] Chaichian, M. and Nelipa, N.F.: *Introduction to Gauge Field Theories*, Springer-Verlag, Berlin (1984).
- [C73] Chen, B.Y.: *Geometry of Submanifolds*, Marcel Dekker, New York (1973).
- [C81] Chen, B.Y.:  $CR$ -Submanifolds of a Kähler manifold, I., *J. Differential Geometry*, **16**, 305–323 (1981).
- [Che48] Chern, S.S.: Local equivalence and Euclidean connection in Finsler spaces, *Sci. Rep. Tsing Hua Univ.*, **5**, 95–121 (1948).
- [Che53] Chern, S.S.: Pseudo-groupes continus infinis, *Colloque de Géométrie Différentielle*, Strasbourg, 119–136 (1953).
- [Che66] Chern, S.S.: The geometry of  $G$ -structures, *Bull. Amer. Math. Soc.*, **72**, 167–219 (1966).

- [Cor85] Cordero, L.A.: Sheaves and cohomologies associated to subfoliations, *Resultate Math.*, **8**, 9–20 (1985).
- [CG76] Cordero, L.A. and Gadea, P.M.: Exotic characteristic classes and subfoliations, *Ann. Inst. Fourier, Grenoble*, **26**, 225–237 (1976).
- [CFG96] Cruceanu, V., Fortuny, P. and Gadea, P.M.: A survey on paracomplex geometry, *Rocky Mountain J. Math.*, **28**, 83–115 (1996).
- [CB88] Currás-Bosch, C.: The geometry of totally geodesic foliations admitting Killing fields, *Tôhoku Math. J.*, **40**, 535–548 (1988).
- [deR52] de Rham, G.: Sur la réductibilité d'un espace de Riemann, *Comment. Math. Helv.*, **26**, 328–344 (1952).
- [ER44] Ehresmann, Ch. and Reeb, G.: Sur les champs d'éléments de contact de dimension  $p$  complètement intégrables dans une variété continuellement différentiable  $V_n$ , *C.R. Acad. Sci. Paris*, **216**, 628–630 (1944).
- [Esc82] Escobales, Jr., R.H.: The integrability tensor for bundle-like foliations, *Trans. Amer. Math. Soc.*, **270**, No. 1, 333–339 (1982).
- [Far79] Farran, H.R.: Foliated pseudoriemannian and symplectic manifolds, *Progress of Math.*, **13**, 59–64 (1979).
- [Far80] Farran, H.R.:  $G$ -structures on manifolds with parallel foliations, *J. Kuwait Univ. (Science)*, **7**, 59–68 (1980).
- [Far81] Farran, H.R.: Foliations by suspensions, *Proc. Conference on Algebra and Geometry, Kuwait Univ.*, 83–87 (1981).
- [Far83] Farran, H.R.: Almost product Riemannian manifolds, *Czechoslovak Math. J.*, **33**, 119–125 (1983).
- [FR96] Farran, H.R. and Robertson, S.A.: Symmetric foliations, *Textos de Matematica, Series B*, No. **10**, 12–23 (1996).
- [Fei75] Feigin, B.L.: Characteristic classes of flags of foliations, *Functional Anal. Appl.*, **9**, 312–317 (1975).
- [Fer70] Ferus, D.: Totally geodesic foliations, *Math. Ann.*, **188**, 313–316 (1970).
- [Fuj60] Fujimoto, A.: On the structure tensor of  $G$ -structure, *Mem. Coll. Sci. Univ. Kyoto, Ser. A.*, **18**, 157–169 (1960).
- [Fur72] Furness, P.M.D.: Parallel foliations, Ph.D. Thesis, University of Durham (1972).
- [Fur74] Furness, P.M.D.: Affine foliations of codimension one, *Quart. J. Math. Oxford*, **25** (2), 151–161 (1974).
- [Ghy83] Ghys, E.: Classification des feuilletages totalement géodésiques de codimension un, *Comment. Math. Helv.*, **58**, 543–572 (1983).
- [Gra67] Gray, A.: Pseudo-Riemannian almost product manifolds and submersions, *J. Math. Mech.*, **16**, 715–737 (1967).
- [GG85] Gromoll, D. and Grove, K.: One-dimensional metric foliations in constant curvature spaces, *Differential Geometry and Complex Analysis*, Springer-Verlag, New York, 165–168 (1985).
- [Hae80] Haefliger, A.: Some remarks on foliations with minimal leaves, *J. Differential Geom.*, **15**, 269–284 (1980).
- [HH83] Hector, G. and Hirsch, U.: *Introduction to the Geometry of Foliations*, Parts A and B, Vieweg, Braunschweig (1981) and (1983).
- [Hel01] Helgason, S.: *Differential Geometry, Lie Groups, and Symmetric Spaces*, Amer. Math. Soc., Providence, Graduate Studies in Math., Vol. **34** (2001).
- [Hor27] Horak, Z.: Sur les systèmes non holonomes, *Bull. Internat. Acad. Sci. Bohème*, 1–18 (1927).

- [Ian71] Ianuş, S.: Some almost product structures on manifolds with linear connections, *Kodai Math. Sem. Rep.*, **23**, 305–310 (1971).
- [Jay92] Jayne, N.: Legendre Foliations on Contact Metric Manifolds, Ph.D. Thesis, Massey University (1992).
- [Jay94] Jayne, N.: A note on the sectional curvature of Legendre foliations, *Yokohama Math. J.*, **41**, 153–161 (1994).
- [JW80] Johnson, D.L. and Whitt, L.B.: Totally geodesic foliations, *J. Differential Geometry*, **15**, 225–235 (1980).
- [KT71] Kamber, F.W. and Tondeur, Ph.: Invariant differential operators and the cohomology of Lie algebra sheaves, *Memoirs Amer. Math. Soc.*, **113**, 1–125 (1971).
- [KT82] Kamber, F.W. and Tondeur, Ph.: Harmonic foliations, Proc. Nat. Sci. Foundation Conference on Harmonic Maps (Tulane, Dec. 1980), *Lecture Notes in Math.*, **949**, Springer-Verlag, New York, 87–121 (1982).
- [Kas59] Kashiwabara, S.: The decomposition of a differentiable manifold and its applications, *Tôhoku Math. J.*, **11**, 43–53 (1959).
- [KT92] Kim, H. and Tondeur, Ph.: Riemannian foliations on manifolds with non-negative curvature, *Manuscripta Math.*, **74**, 39–45 (1992).
- [Kit86] Kitahara, H.: *Differential Geometry of Riemannian Foliations*, Lecture Notes, Kyungpook National Univ. (1986).
- [KN63] Kobayashi, S. and Nomizu, K., *Foundations of Differential Geometry*, Vol. I, Interscience, New York (1963).
- [K90] Koike, N.: Totally umbilic foliations and decomposition theorems, *Saitama Math. J.*, **8**, 1–18 (1990).
- [Kow80] Kowalski, O.: *Generalized Symmetric Spaces*, Lecture Notes in Math., **805**, Springer-Verlag, Berlin, 1980.
- [Law74] Lawson, Jr., H.B.: Foliations, *Bull. Amer. Math. Soc.*, **80**, No. 3, 369–418 (1974).
- [Lib91] Libermann, P.: Legendre foliations on contact manifolds, *Diff. Geometry and Its Appl.*, **1**, 57–76 (1991).
- [Mat86] Matsumoto, M.: *Foundations of Finsler Geometry and Special Finsler Spaces*, Kaiseisha Press, Otsushi, Shigaken (1986).
- [Mir82] Miron, R.: Vector bundles Finsler geometry, Proc. Nat. Sem. Finsler Spaces, Braşov, 147–188 (1982).
- [Mol88] Molino, P.: *Riemannian Foliations*, Progress in Math., Vol. **73**, Birkhäuser, Boston (1988).
- [Nem85] Nemoto, H.: On differential geometry of general connections, *TRU Math.*, **21**, 67–94 (1985).
- [NN57] Newlander, A. and Nirenberg, L.: Complex analytic coordinates in almost complex manifolds, *Ann. of Math.*, **65**, 391–404 (1957).
- [Nit71] Nitecki, Z.: *Differentiable Dynamics*, M.I.T., Cambridge (1971).
- [Oku62] Okumura, M.: On infinitesimal conformal and projective transformations of normal contact spaces, *Tôhoku Math. J.*, **14**, 398–412 (1962).
- [O66] O'Neill, B.: The fundamental equations of a submersion, *Michigan Math. J.*, **13**, 459–469 (1966).
- [O83] O'Neill, B.: *Semi-Riemannian Geometry with Applications to Relativity*, Academic Press, New York (1983).
- [Orn86] Ornea, L.: On  $CR$ -submanifolds of a locally conformal Kähler manifold, *Demonstratio Mathematica*, **19**, No. 4, 863–869 (1986).

- [Osh83] Oshikiri, G.: Totally geodesic foliations and Killing fields, *Tôhoku Math. J.*, **35**, 387–392 (1983).
- [Osh86] Oshikiri, G.: Totally geodesic foliations and Killing fields, II, *Tôhoku Math. J.*, **38**, 351–356 (1986).
- [Osh90] Oshikiri, G.: Mean curvature functions of codimension-one foliations, *Comment. Math. Helv.*, **65**, 79–84 (1990).
- [Osh91] Oshikiri, G.: Mean curvature functions of codimension-one foliations, *Comment. Math. Helv.*, **66**, 512–520 (1991).
- [Ots61] Otsuki, T.: On general connections, I; II, *Math. J. Okayama Univ.*, **9**, 99–164 (1960); *Math. J. Okayama Univ.*, **10**, 113–124 (1961).
- [Pan90] Pang, M.Y.: The structure of Legendre foliations, *Trans. Amer. Math. Soc.*, **320** (2), 417–455 (1990).
- [PW52] Patterson, E.M. and Walker, A.G.: Riemann Extensions, *Quart. J. Math.*, **3**, 19–28 (1952).
- [Rei59a] Reinhart, B.L.: Foliated manifolds with bundle-like metric, *Annals of Math.*, **69** (2), 119–132 (1959).
- [Rei59b] Reinhart, B.L.: Harmonic integrals on foliated manifolds, *Amer. J. Math.*, **81**, 529–536 (1959).
- [Rei83] Reinhart, B.L.: *Differential Geometry of Foliations*, Springer-Verlag, Berlin (1983).
- [Rob70] Robertson, S.A.: Grid Manifolds, *J. Differential Geometry*, **4**, 245–253 (1970).
- [RF74] Robertson, S.A. and Furness, P.M.D.: Parallel framings and foliations on pseudoriemannian manifolds, *J. Differential Geometry*, **9**, 409–422 (1974).
- [Rov98] Rovenskii, V.: *Foliations on Riemannian Manifolds and Submanifolds*, Birkhäuser, Boston (1998).
- [Rum79] Rummler, H.: Quelques notions simples en géométrie riemannienne et leurs applications aux feuilletages compacts, *Comment. Math. Helv.*, **54**, 224–239 (1979).
- [San82] Sanini, A.: Foliazioni minimali e totalmente geodetiche, *Atti Accad. Sci. Torino, Cl. Sci. Fis. Mat. Natur.*, **116**, 117–126 (1982).
- [Sch28] Schouten, J.A.: On non-holonomic connexions, *Proc. Kon. Akad. Amsterdam*, **31**, 291–299 (1928).
- [Sch54] Schouten, J.A.: *Ricci Calculus*, 2<sup>nd</sup> edition, Springer-Verlag, Berlin (1954).
- [SS21] Schouten, J.A. and Struik, D.J.: On some properties of general manifolds related to Einstein's theory of gravitation, *Amer. J. Math.*, **43**, 213–216 (1921).
- [SVK30] Schouten, J.A. and Van Kampen, E.R.: Zur Einbettungs- und Krümmungstheorie nichtholonomer Gebilde, *Math. Ann.*, **103**, 752–783 (1930).
- [Shu69] Shub, M.: Endomorphisms of compact differentiable manifolds, *Amer. J. Math.*, **91**, 175–199 (1969).
- [Stee51] Steenrod, N.: *Topology of Fibre Bundles*, Princeton Univ. Press, Princeton, New Jersey (1951).
- [Ste83] Sternberg, S.: *Lectures on Differential Geometry*, 2<sup>nd</sup> edition, Chelsea Publ. Comp., New York (1983).
- [Sul79] Sullivan, D.: A homological characterization of foliations consisting of minimal surfaces, *Comment. Math. Helv.*, **54**, 218–223 (1979).

- [Tam76] Tamura, I.: *Topology of Foliations: An Introduction*, AMS Transactions of Mathematical Monographs, **97** (1992) (first published in Japanese by Iwanami Shoten Publ., Tokyo (1976)).
- [Tan68] Tanno, S.: The topology of contact Riemannian manifolds, *Illinois J. Math.*, **12**, 700–717 (1968).
- [Tan69] Tanno, S.: Sasakian manifolds with constant  $\varphi$ -holomorphic sectional curvature, *Tôhoku Math. J.*, **21**, 501–507 (1969).
- [Tan72] Tanno, S.: A theorem on totally geodesic foliations and its applications, *Tensor, N.S.*, **24**, 116–122 (1972).
- [Tash69] Tashiro, Y.: On contact structures of tangent spheres bundles, *Tôhoku Math. J.*, **21**, 117–143 (1969).
- [Tho39] Thomas, T.Y.: The decomposition of Riemann spaces in the large, *Monatsh. Math. Phys.*, **47**, 388–418 (1939).
- [Thu76] Thurston, W.: Some simple examples of symplectic manifolds, *Proc. Amer. Math. Soc.*, **55**, 467–468 (1976).
- [Ton88] Tondeur, Ph.: *Foliations on Riemannian Manifolds*, Springer-Verlag, Berlin (1988).
- [Ton97] Tondeur, Ph.: *Geometry of Foliations*, Birkhäuser, Basel (1997).
- [TV90] Tondeur, Ph. and Vanhecke, L.: Transversally symmetric Riemannian foliations, *Tôhoku Math. J.*, **42**, 307–317 (1990).
- [TV96] Tondeur, Ph. and Vanhecke, L.: Jacobi fields, Riccati equation and Riemannian foliations, *Illinois J. Math.*, **40**, No. 2, 211–225 (1996).
- [Vai71] Vaisman, I.: Variétés riemanniennes feuilletées, *Czechoslovak Math. J.*, **21** (96), 46–75 (1971).
- [VG26a] Vrănceanu, G.: Sur les espaces non holonomes, *C.R. Acad. Sci. Paris*, **183**, 852–854 (1926).
- [VG26b] Vrănceanu, G.: Sur le calcul différentiel absolu pour les variétés non holonomes, *C.R. Acad. Sci. Paris*, **183**, 1083–1085 (1926).
- [VG31] Vrănceanu, G.: Sur quelques points de la théorie des espaces non holonomes, *Bul. Fac. St. Cernăuți*, **5**, 177–205 (1931).
- [VG57] Vrănceanu, G.: *Leçons de Géométrie Différentielle*, Vol. II, Edition de L' Académie de la République Populaire de Roumanie (1957).
- [Wa84] Walczak, P.: Mean curvature functions for codimension-one foliations with all leaves compact, *Czech. Math. J.*, **34**, 146–155 (1984).
- [Wal50a] Walker, A.G.: Canonical form for a Riemannian space with a parallel field of null planes, *Quart. J. Math. Oxford*, **1** (2), 69–79 (1950).
- [Wal50b] Walker, A.G.: Canonical forms (II): Parallel partially null planes, *Quart. J. Math. Oxford*, **1** (2), 147–152 (1950).
- [Wal55] Walker, A.G.: Connexions for parallel distributions in the large, *Quart. J. Math. Oxford*, **6** (2), 301–308 (1955).
- [Wal58] Walker, A.G.: Connections for parallel distributions in the large, II, *Quart. J. Math. Oxford*, **9** (2), 221–231 (1958).
- [Was97] Walschap, G.: Umbilic foliations and curvature, *Illinois J. Math.*, **41**, No. 1, 122–128 (1997).
- [Wei71] Weinstein, A.: Symplectic manifolds and their Lagrangian submanifolds, *Advances in Mathematics*, **6**, 329–346 (1971).
- [Wil56] Willmore, T.J.: Parallel distributions on manifolds, *Proc. London Math. Soc.*, **6** (3), 191–204 (1956).
- [Wol67] Wolf, G.: *Spaces of Constant Curvature*, McGraw Hill, New York (1967).

- [Wu64] Wu, H.: On the de Rham decomposition theorem, *Illinois J. Math.*, **8**, 291–311 (1964).
- [YK82] Yano, K. and Kon, M.: Contact  $CR$ -submanifolds, *Kodai Math. J.*, **5**, 238–252 (1982).
- [YK83] Yano, K. and Kon, M.:  $CR$ -Submanifolds of Kählerian and Sasakian Manifolds, Birkhäuser, Boston (1983).
- [YK84] Yano, K. and Kon, M.: Structures on Manifolds, World Scientific, Singapore (1984).
- [YP40] Yano, K. and Petrescu, S.: Sur les espaces métriques non holonomes complémentaires, *Disquisit. Math. Phys.*, **1**, 191–246 (1940).
- [Y83] Yorozu, S.: Behaviour of geodesics in foliated manifolds with bundle-like metrics, *J. Math. Soc. Japan*, Vol. **35**, No. 2, 251–272 (1983).

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