# DAFTAR PUSTAKA

Aldrovandi, R. dan Pereira, J. G. (2012), *Teleparallel Gravity: An Introduction*, Springer, Dordrecht.

Arandi, T. A., Hermanto, A. dan Rosyid, M. F. (2025), 'Reductions of cartan geometry and symmetry breaking in teleparallel gravitational gauge theories', *International Journal of Geometric Methods in Modern Physics* **0**(0), 2550228. https://doi.org/10.1142/S0219887825502287.

Atiyah, M. (2005), 'Einstein and geometry', *Current Science* **89**, 2041--2044.

Attard, J., François, J., Lazzarini, S. dan Masson, T. (2018), *The Dressing Field Method of Gauge Symmetry Reduction, a Review with Examples*, Springer International Publishing, Cham, pp. 377--415.

Attard, J., François, J. dan Lazzarini, S. (2016), 'Weyl gravity and Cartan geometry', *Phys. Rev. D* **93**, 085032.

Attard, J., François, J., Lazzarini, S. dan Masson, T. (2020), 'Cartan connections and Atiyah Lie algebroids', *Journal of Geometry and Physics* **148**, 103541.

Baez, J. C. dan Huerta, J. (2010), 'The algebra of grand unified theories'.

Beckers, J., Harnad, J., Perroud, M. dan Winternitz, P. (1978), 'Tensor fields invariant under subgroups of the conformal group of space-time', *Journal of Mathematical Physics* **19**(10), 2126--2153.

Beekman, A. J., Rademaker, L. dan van Wezel, J. (2019), 'An Introduction to Spontaneous Symmetry Breaking', *SciPost Phys. Lect. Notes* p. 11.

Bejarano, C., Ferraro, R., Fiorini, F. dan Guzmán, M. J. (2019), 'Reflections on the Covariance of Modified Teleparallel Theories of Gravity', *Universe* **5**(6).

Bengochea, G. R. dan Ferraro, R. (2009), 'Dark torsion as the cosmic speed-up', *Physical Review D* **79**, 124019.

Blagojević, M. dan Hehl, F. W. (2013), *Gauge Theories of Gravitation: A Reader with Commentaries*, World Scientific, Singapore.

Blumenhagen, R. dan Plauschinn, E. (2009), *Introduction to Conformal Field Theory: With Applications to String Theory*, Springer.

Brading, K. dan Castellani, E. (2003), *Symmetries in Physics: Philosophical Reflections*, Cambridge University Press, Cambridge.

Cai, Y.-F., Capozziello, S., Laurentis, M. D. dan Saridakis, E. N. (2016), '$f(T)$ teleparallel gravity and cosmology', *Reports on Progress in Physics* **79**(10), 106901.

Capozziello, S., De Falco, V. dan Ferrara, C. (2022), 'Comparing equivalent gravities: common features and differences', *The European Physical Journal C* **82**(10), 865.

Cartan, E. (2007), *The Dynamics of Continuous Media and the Notion of an Affine Connection on Space-Time*, Springer Netherlands, Dordrecht, pp. 2030--2053.

Castellani, E. dan Ismael, J. (2016), 'Which Curie's Principle?', *Philosophy of Science* **83**(5), 1002--1013.

Catren, G. (2015), 'Geometric foundations of Cartan gauge gravity', *International Journal of Geometric Methods in Modern Physics* **12**(04), 1530002.

Chen, B. G.-g., Derbes, D., Griffiths, D., Hill, B., Sohn, R. dan Ting, Y.-S. (2018), *Lectures of Sidney Coleman on Quantum Field Theory*, World Scientific.

Coley, A. A., van den Hoogen, R. J. dan McNutt, D. D. (2022), 'Symmetric teleparallel geometries', *Classical and Quantum Gravity* **39**(22), 22LT01.

Combi, L. dan Romero, G. E. (2018), 'Is Teleparallel Gravity Really Equivalent to General Relativity?', *Annalen der Physik* **530**(1), 1700175.

Drechsler, W. dan Mayer, M. E. (1977), *Fiber Bundle Techniques in Gauge Theories*, Springer-Verlag Berlin, Heidelberg.

Eckstein, M., Heller, M. dan Szybka, S. (2014), *Mathematical Structures of the Universe*, Copernicus Center Press.

Fatibene, L. dan Francaviglia, M. (2003), *Natural and Gauge Natural Formalism for Classical Field Theorie: A Geometric Perspective including Spinors and Gauge Theories*, Springer Netherlands.

Ferraro, R. dan Fiorini, F. (2015), 'Remnant group of local Lorentz transformations in $f(T)$ theories', *Phys. Rev. D* **91**, 064019.

Fontanini, M., Huguet, E. dan Le Delliou, M. (2019), 'Teleparallel gravity equivalent of general relativity as a gauge theory: Translation or Cartan connection?', *Phys. Rev. D* **99**, 064006.

Fournel, C., Lazzarini, S. dan Masson, T. (2013), 'Formulation of gauge theories on transitive Lie algebroids', *Journal of Geometry and Physics* **64**, 174--191.

François, J. (2014), 'Reduction of gauge symmetries: a new geometrical approach'.

Friederich, S. (2013), 'Gauge symmetry breaking in gauge theories--in search of clarification', *European Journal for Philosophy of Science* **3**(2), 157--182.

Furey, N. (2025*a*), 'An algebraic roadmap of particle theories', *Annalen der Physik* **537**(4), 2400322.

Furey, N. (2025*b*), 'An algebraic roadmap of particle theories', *Annalen der Physik* **537**(4), 2400323.

Furey, N. (2025*c*), 'An algebraic roadmap of particle theories', *Annalen der Physik* **537**(4), 2400324.

Gell-Mann, M. (1961), 'The Eightfold Way: A Theory of Strong Interaction Symmetry'.

Georgi, H. dan Glashow, S. L. (1974), 'Unity of all elementary-particle forces', *Phys. Rev. Lett.* **32**, 438--441.

Golovnev, A. dan Guzmán, M.-J. (2021), 'Lorentz symmetries and primary constraints in covariant teleparallel gravity', *Phys. Rev. D* **104**, 124074.

Golovnev, A., Koivisto, T. dan Sandstad, M. (2017), 'On the covariance of teleparallel gravity theories', *Classical and Quantum Gravity* **34**(14), 145013.

Hall, B. C. (2015), *Lie Groups, Lie Algebras, and Representations*, Vol. I, Springer.

Hamilton, M. J. (2017), *Mathematical Gauge Theory*, Springer Cham, Cham.

Hayashi, K. dan Shirafuji, T. (1979), 'New general relativity', *Physical Review D* **19**(12), 3524--3553. Addendum: Phys. Rev. D 24 (1981) 3311--3314.

Hehl, F. W., von der Heyde, P., Kerlick, G. D. dan Nester, J. M. (1976), 'General relativity with spin and torsion: Foundations and prospects', *Rev. Mod. Phys.* **48**, 393--416.

Huguet, E., Le Delliou, M. dan Fontanini, M. (2021), 'Cartan approach to teleparallel equivalent to general relativity: A review', *International Journal of Geometric Methods in Modern Physics* **18**(supp01), 2140004.

Huguet, E., Le Delliou, M., Fontanini, M. dan Lin, Z.-C. (2021), 'Teleparallel gravity as a gauge theory: Coupling to matter using the Cartan connection', *Phys. Rev. D* **103**, 044061.

Jadczyk, A. (2012), 'Conformally Compactified Minkowski Space: Myths and Facts', *Prespacetime Journal* **3**(2), 131--140.

Järv, L., Rünkla, M., Saal, M. dan Vilson, O. (2018), 'Nonmetricity formulation of general relativity and its scalar-tensor extension', *Phys. Rev. D* **97**, 124025.

Jiménez, J. B., Heisenberg, L. dan Koivisto, T. S. (2019), 'The geometrical trinity of gravity', *Universe* **5**(7).

Kibble, T. W. B. (1961), 'Lorentz Invariance and the Gravitational Field', *Journal of Mathematical Physics* **2**(2), 212--221.

Kibble, T. W. B. (2015), 'Spontaneous symmetry breaking in gauge theories', *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* **373**(2032), 20140033.

Knox, E. (2011), 'Newton–Cartan theory and teleparallel gravity: The force of a formulation', *Studies in History and Philosophy of Science Part B: Studies in History and Philosophy of Modern Physics* **42**(4), 264--275.

Knox, E. dan Wilson, A. (2021), *The Routledge Companion to Philosophy of Physics*, Routledge, Oxfordshire.

Kobayashi, S. dan Nomizu, K. (1963), *Foundations of Differential Geometry I*, Vol. I, Interscience Publishers, New York.

Krasnov, K. (2020), *Formulations of General Relativity: Gravity, Spinors and Differential Forms*, Cambridge University Press, Cambridge.

Krasnov, K. dan Percacci, R. (2018), 'Gravity and unification: a review', *Classical and Quantum Gravity* **35**(14), 143001.

Krššák, M. dan Saridakis, E. N. (2016), 'The covariant formulation of $f(T)$ gravity', *Classical and Quantum Gravity* **33**(11), 115009.

Krššák, M., van den Hoogen, R. J., Pereira, J. G., Böhmer, C. G. dan Coley, A. A. (2019), 'Teleparallel theories of gravity: illuminating a fully invariant approach', *Classical and Quantum Gravity* **36**(18), 183001.

Krššák, M. (2017), 'Holographic renormalization in teleparallel gravity', *European Physical Journal C* **77**, 44.

Lehmkuhl, D. (2014), 'Why Einstein did not believe that general relativity geometrizes gravity', *Studies in History and Philosophy of Science Part B: Studies in History and Philosophy of Modern Physics* **46**, 316--326.

Li, L.-F. (1974), 'Group theory of the spontaneously broken gauge symmetries', *Phys. Rev. D* **9**, 1723--1739.

Lisi, A. G. (2015), 'Lie Group Cosmology'.

MacDowell, S. W. dan Mansouri, F. (1977), 'Unified Geometric Theory of Gravity and Supergravity', *Phys. Rev. Lett.* **38**, 739--742.

Maluf, J. W. (2013), 'The teleparallel equivalent of general relativity', *Annalen der Physik* **525**(5), 339--357.

Maluf, J. W., Ulhoa, S. C., da Rocha-Neto, J. F. dan Carneiro, F. L. (2020), 'Difficulties of teleparallel theories of gravity with local Lorentz symmetry', *Classical and Quantum Gravity* **37**(6), 067003.

Marle, C.-M. (2007), *The works of Charles Ehresmann on connections: from Cartan connections to connections on fibre bundles*, Vol. 76, Banach Center Publications, Warszawa, p. 65–86.

McCabe, G. (2007), *The Structure and Interpretation of the Standard Model*, Elsevier Science, Amsterdam.

Ne'eman, Y. (1961), 'Derivation of strong interactions from a gauge invariance', *Nuclear Physics* **26**(2), 222--229.

Nester, J. dan Yo, H.-J. (1999), 'Symmetric teleparallel general relativity', *Chin. J. Phys. (Taipei)* **37**.

Olver, P. J. (1993), *Applications of Lie Groups to Differential Equations*, Springer, New York.

O'Raifeartaigh, L. (1997), *The Dawning of Gauge Theory*, Princeton University Press, Princeton.

Pati, J. C. dan Salam, A. (1974), 'Lepton number as the fourth "color"', *Phys. Rev. D* **10**, 275--289.

Rickles, D. (2007), *Symmetry, Structure, and Spacetime*, Elsevier Science, Amsterdam.

Robson, B. A. (2021), *Understanding Gravity: The Generation Model Approach*, World Scientific, Singapore.

Rovelli, C. (2015), 'Aristotle's Physics: A Physicist's Look', *Journal of the American Philosophical Association* **1**(1), 23--40.

Rudolph, G. dan Schmidt, M. (2017), *Differential Geometry and Mathematical Physics: Part II. Fibre Bundles, Topology and Gauge Fields*, Springer Netherlands, Dordrecht.

Sanomiya, T. A. T., Lobo, I. P., Formiga, J. B., Dahia, F. dan Romero, C. (2020), 'Invariant approach to Weyl's unified field theory', *Phys. Rev. D* **102**, 124031.

Sardanashvily, G. (2016), 'Gauge gravitation theory: Gravity as a higgs field', *International Journal of Geometric Methods in Modern Physics* **13**(06), 1650086.

Sauer, T. (2006), 'Field equations in teleparallel space-time: Einstein's Fernparallelismus approach toward unified field theory', *Historia Mathematica* **33**, 399--439.

Scholz, E. (2019), 'E. Cartan's attempt at bridge-building between Einstein and the Cosserats -- or how translational curvature became to be known as torsion', *The European Physical Journal H* **44**(1), 47--75.

Schottenloher, M. (2008), *A Mathematical Introduction to Conformal Field Theory*, Lecture Notes in Physics 759, 2 edn, Springer-Verlag Berlin Heidelberg.

Shankaranarayanan, S. dan Johnson, J. P. (2022), 'Modified theories of gravity: Why, how and what?', *General Relativity and Gravitation* **54**(44).

Sharpe, R. W. (1997), *Differential Geometry: Cartan's Generalization of Klein's Erlangen Program*, Springer-Verlag, New York.

Socolovsky, M. (2012*a*), 'Fiber Bundles, Connections, General Relativity, and the Einstein-Cartan Theory – Part I', *Advances in Applied Clifford Algebras* **22**, 837–872.

Socolovsky, M. (2012*b*), 'Fiber Bundles, Connections, General Relativity, and the Einstein-Cartan Theory – Part II', *Advances in Applied Clifford Algebras* **22**, 873–909.

Steenrod, N. (1951), *The Topology of Fibre Bundles*, Princeton University Press, Princeton.

Stefanovich, E. (2018), *Quantum Mechanics*, De Gruyter, Berlin.

Stelle, K. S. dan West, P. C. (1979), 'de Sitter gauge invariance and the geometry of the Einstein-Cartan theory', *Journal of Physics A: Mathematical and General* **12**(8), L205--L210.

Stelle, K. S. dan West, P. C. (1980), 'Spontaneously broken de Sitter symmetry and the gravitational holonomy group', *Phys. Rev. D* **21**, 1466--1488.

Strocchi, F. (2021), *Symmetry Breaking*, Theoretical and Mathematical Physics, Springer Berlin Heidelberg.

Struyve, W. (2011), 'Gauge invariant accounts of the Higgs mechanism', *Studies in History and Philosophy of Science Part B: Studies in History and Philosophy of Modern Physics* **42**(4), 226--236.

Tamanini, N. dan Böhmer, C. G. (2012), 'Good and bad tetrads in $f(T)$ gravity', *Phys. Rev. D* **86**, 044009.

Trautman, A. (1973), 'On the structure of the Einstein-Cartan equations', *Symp. Math.* **12**, 139--162.

Utiyama, R. (1956), 'Invariant Theoretical Interpretation of Interaction', *Phys. Rev.* **101**, 1597--1607.

Vardoulakis, I. (2019), *Cosserat Continuum Mechanics: With Applications to Granular Media*, Springer Cham, Cham.

Čap, A. dan Slovák, J. (2009), *Parabolic Geometries I: Background and General Theory*, American Mathematical Society, Providence.

Westman, H. F. dan Zlosnik, T. G. (2013), 'Cartan gravity, matter fields, and the gauge principle', *Annals of Physics* **334**, 157--197.

Westman, H. F. dan Zlosnik, T. G. (2015), 'An introduction to the physics of Cartan gravity', *Annals of Physics* **361**, 330--376.

Whitney, H. (1935), 'Sphere-Spaces', *Proceedings of the National Academy of Sciences* **21**(7), 464--468.

Whitney, H. (1940), 'On the Theory of Sphere-Bundles', *Proceedings of the National Academy of Sciences* **26**(2), 148--153.

Wiesenfeldt, S. (2008), 'Grand Unified Theories. Block Course of the International Graduate School, GRK 881, Sept. 2008'. `https://www.physicsforums.com/attachments/bielefeld_half-pdf.86350/`.

Wise, D. K. (2010), 'MacDowell–Mansouri gravity and Cartan geometry', *Classical and Quantum Gravity* **27**(15), 155010.

Wolf, W. J., Read, J. dan Vigneron, Q. (2024), 'The non-relativistic geometric trinity of gravity', *General Relativity and Gravitation* **56**(10), 126.

Wu, T. T. dan Yang, C. N. (1975), 'Concept of nonintegrable phase factors and global formulation of gauge fields', *Phys. Rev. D* **12**, 3845--3857.

Yang, C. N. dan Mills, R. L. (1954), 'Conservation of Isotopic Spin and Isotopic Gauge Invariance', *Phys. Rev.* **96**, 191--195.

Zardecki, A. (1988), 'Gravity as a gauge theory with Cartan connection', *Journal of Mathematical Physics* **29**(7), 1661--1666.

Złośnik, T. G. dan Westman, H. F. (2017), 'A first-order approach to conformal gravity', *Classical and Quantum Gravity* **34**(24), 245001.