

Bibliography

-
- [1] J. Aharoni, *The Special Theory of Relativity* (Clarendon, Oxford, 1965).
- [2] D. W. Allan *et al.*, *IEEE Trans. Instrum. Meas.*, **IM-34**(2), (1985), pp. 118.
- [3] J. Anandan, *Phys. Rev. D*, **24**, (1981), pp. 338.
- [4] R. Anderson, H. R. Bilger and G. E. Stedman, *Am. J. Phys.*, **62**(11), (1994), pp. 975.
- [5] R. Anderson, I. Vetharaniam and G. E. Stedman, *Conventionality of Synchronisation, Gauge Dependence and Test Theories of Relativity, Physics Reports*, **295**, (1998), pp. 93, this review article has an extensive list of references (240 in number).
- [6] Neil Ashby, *The Sagnac Effect in the Global Positioning System*, in G. Rizzi and M. L. Ruggiero, eds., *Relativity in Rotating Frame, Fundamental Theories of Physics* (Kluwer, Dordrecht, 2004).
- [7] A. Ashtekar and A. Magnon, *J. Math. Phys.*, **16**(2), (1975), pp. 341.
- [8] Aniket Basu, R. S. Saraswat, Kedar B. Khare, G. P. Sastry and Sougato Bose, *Eur. J. Phys.*, **23**, (2002), pp. 295.
- [9] P. G. Bergmann, *Introduction to the Theory of Relativity* (Prentice-Hall of India, New Delhi, 1992).
- [10] I. L. Bershtein, *Dokl. Akad. Nauk. SSSR*, **75**, (1950), p. 635.
- [11] Max Born, *Ann. Physik*, **30**, (1909), p. 840.
- [12] S. K. Bose, *General Theory of Relativity* (Wiley Eastern, New Delhi).

- [13] R. W. Brehme, *Am. J. Phys.*, **53**(1), (1985), pp. 56.
- [14] R. W. Brehme, *Am. J. Physics.*, **56**(9).
- [15] Bridgeman, *A Sophisticate's Primer to Relativity* (Wesleyan University, Middletown, 1962).
- [16] T. Budden, *Found. Phys. Lett.*, **11**, (1998), p. 4.
- [17] G. Cavalleri, *Nuovo Cimento B*, **53**, (1968), pp. 415.
- [18] Papia Chakraborty, *On Some Foundational Questions in Relativity and Gravitation*, Unpublished, University of North Bengal (1993).
- [19] S. Chandrasekhar, *The Mathematical Theory of Black Holes*, Oxford Classic Texts in the Physical Sciences (Clarendon, Oxford, 1985).
- [20] R. Colella, A. W. Overhauser, J. L. Staudenmann and S.A. Werner, *Phys. Rev. A*, **21**, (1980), pp. 1419.
- [21] Maria B. Cranor, Elizabeth M. Heider and Richard H. Price, *Am. J. Phys.*, **68**(11), (2000), pp. 1016.
- [22] Talal A. Debs and Michael L. G. Redhead, *Am. J. Physics*, **64**(4), (1996), pp. 384.
- [23] P. Di Mauro, *La formula di diffusione Compton con la meccanica Newtoniana*, Atti del XVI Congresso Nazionale di Storia della Fisica e dell' Astronomia, Como 28-29 , 179-184 (Maggio 1999).
- [24] D. Dieks, *Eur. J. Phys.*, **12**, (1991), pp. 253.
- [25] D. Dieks and G. Nienhuis, *Am. J. Phys.*, **58**, (1990), pp. 650.

- [26] A. Dufour and F. Prunier, *Compt. Rend.*, **204**, (1937), p. 1322.
- [27] A. Dufour and F. Prunier, *Compt. Rend.*, **205**, (1937), p. 658.
- [28] A. S. Eddington, *The Mathematical Theory of Relativity* (Cambridge University Press, Cambridge, 1965).
- [29] Paul Ehrenfest, *Phys. Z.*, **10**, (1909), p. 918.
- [30] A. Einstein, *Astron. Nach.*, **198**, (1914), p. 378.
- [31] A. Einstein, *Relativity: the Special and the General Theory* (Methuen, London, 1960).
- [32] Albert Einstein, *On Electrodynamics of Moving Body*, *Annalen Der Physik*, **17**(891), (1905), pp. 1, the paper is now freely available at <http://www.fourmilab.ch/>.
- [33] Albert Einstein, *Ann. d. Phys.*, **23**, (1907), p. 371.
- [34] Albert Einstein, *The Meaning of Relativity* (Oxford University Press, New Delhi, 1951).
- [35] Albert Einstein, *Einstein's Miraculous year: Five Papers That Changed the Face of Physics* (Scientia, New Delhi, 1998), edited and introduced by John Stachel, foreward by Roger Penrose.
- [36] B. Ellis and P. Bowman, *Phil. Sci.*, **34**, (1967), p. 116.
- [37] Herman Erlichson, *Am. J. Phys.*, **53**(1), (1985), pp. 53.
- [38] Aurthur Evett, *Understanding the Spacetime Concepts of Special Relativity* (Publishers Creative Services, New York, 1982).

- [39] D. Fargion, L. Chiatti and A. Aiello, *Quantum Mach effect by Sagnac phase shift on Cooper pair in rf-SQUID*, preprint astro-ph/9606117, babbage.sissa.it.
- [40] F. de Felice and S. Usseglio-Tomasset, *Class. Quant. Grav.*, **8**, (1991), pp. 1871.
- [41] S. F. Fung and K. C. Hsieh, *Am. J. Phys.*, **48**, (1980), p. 654.
- [42] S. K. Ghosal, P. Chakraborty and D. Mukhopadhyay, *Europhys. Lett.*, **15**(4), (1991), pp. 369.
- [43] S. K. Ghosal, D. Mukhopadhyay and Papia Chakraborty, *Eur. J. Phys.*, **15**, (1994), pp. 21.
- [44] S. K. Ghosal, Biplab Raychaudhuri, Anjan Kumar Chowdhuri and Minakshi Sarker, *Rotating Disc Problem and Sagnac Phase-Shift formula*, in M. C. Duffy, ed., *Physical Interpretations of Relativity Theory, VIII* (P. D. Publication, Liverpool, 2000), held at Imperial College London.
- [45] S. K. Ghosal, Biplab Raychaudhuri, Anjan Kumar Chowdhuri and Minakshi Sarker, *Relativistic Sagnac Effect and Ehrenfest Paradox*, *Found. Phys.*, **33**(6), (2003), pp. 981.
- [46] S. K. Ghosal, Biplab Raychaudhuri, Anjan Kumar Chowdhuri and Minakshi Sarker, *Found. Phys. Lett.*, **17**(5), (2004), pp. 457.
- [47] S. K. Ghosal, Biplab Raychaudhuri, Anjan Kumar Chowdhuri and Minakshi Sarker, *Found. Phys. Lett.*, **16**(6), (2003), pp. 549.
- [48] S. K. Ghosal, Biplab Raychaudhuri, Minakshi Sarker and Saroj Nepal, *On Synchronization and Desynchronization in Rotating Frames and a Recent*

- Paradox*, in M. C. Duffy, ed., *Physical Interpretation of Relativity Theory (IX)* (2004), held at Imperial College, London (To be Published).
- [49] S.K. Ghosal, K. K. Nandi and P. Chakraborty, *Z. Naturforsch.*, **46a**, (1991), pp. 256.
- [50] S.K. Ghosal and Minakshi Sarker, *Cosmologically Preferred Frame and Sagnac Effect*, in M. C. Duffy, ed., *Physical Interpretation of Relativity Theory (VII)*, vol. Late Papers (1998), held at Imperial College, London.
- [51] F. Goy, *Non-invariant Velocity of Light and Clock Synchronization in Accelerated Systems*, in M. C. Duffy, ed., *Physical Interpretation of Relativity Theory (V)*, pp. 129–138 (1996), held at Imperial College, London.
- [52] D. M. Greenberger, *Rev. Mod. Phys.*, **55**, (1983), p. 875.
- [53] Ø Grøn, *Am. J. Phys.*, **43**, (1975), pp: 869.
- [54] Ø. Grøn, *Space Geometry in Rotating Reference Frames: A Historical Appraisal*, in G. Rizzi and M. L. Ruggiero, eds., *Relativity in Rotating Frames*, Fundamental Theories of Physics (Kluwer, New York, 2004), series Editor: A. van der Merwe.
- [55] A. Grünbaum, W. Salmon, B. van Fraassen and A. Janis, *A Panel Discussion of Simultaneity by Slow Clock Transport in the Special and General Theories of Relativity.*, *Phil. Sc.*, **36**, (1969), pp. 1.
- [56] Adolf Grünbaum, *David Malament and the Conventionality of Simultaneity: A Reply*, available at philsci-archive.pitt.edu/archive/00000184/00/malament.pdf.

- [57] Adolf Grünbaum, *Philosophical Problems of Space and Time*, 2 edn. (Alfred Knopf, New York, 1973).
- [58] J. C. Hafele and R. E. Keating, *Science*, **177**, (1972), p. 166.
- [59] Francis Harress, Ph.D. thesis, Jena (1912).
- [60] P. Harzer, *Astron. Nach.*, **198**, (1914), p. 378.
- [61] H. Hasselbach and M. Nicklaus, *Phys. Rev. A*, **48**, (1993), pp. 143.
- [62] A. Janis, *Conventionality of Simultaneity in Stanford Encyclopedia of Philosophy*, The Metaphysics Research Lab, Center for the Study of Language and Information, Stanford University, available at <http://plato.stanford.edu/entries/spacetime-convensimul>.
- [63] R. Klauber, *Toward a Consistent Theory of Relativistic Rotation*, in G. Rizzi and M. L. Ruggiero, eds., *Relativity in Rotating Frames*, Foundations of Physics (Kluwer, Dordrecht, 2004), series Editor: A. van der Merwe.
- [64] R. D. Klauber, *Found. Phys. Lett.*, **11**, (1998), pp. 405.
- [65] R. D. Klauber, *Am. J. Phys.*, **67**, (1998), pp. 158.
- [66] L. D. Landau and E. M. Lifshitz, *The Classical Theory of Fields*, 4th revised english edition edn. (Butterworth Heinemann, Oxford, 2002).
- [67] P. Langevin, *Compt. Rend.*, **173**, (1921), p. 831.
- [68] P. Langevin, *Compt. Rend.*, **205**, (1937), p. 51.
- [69] Oliver Lodge, *Philos. Trans. R. Soc. (London)*, **184A**, (1893), p. 727.

- [70] Oliver Lodge, *Philos. Trans. R. Soc. (London)*, **189A**, (1897), p. 149.
- [71] A. A. Logunov and Yu. V. Chugree, *Sov. Phys. Uspekhi*, **31**, (1988), p. 861.
- [72] W. M. Macek and D. T. M Davis., *Appl. Phys. Lett.*, **2**, (1963), p. 67.
- [73] D. Malament, *Noûs*, **11**, (1977), p. 293.
- [74] G. B. Malykin, *Sagnac Effect, Physics-Uspekhi*, **40(3)**, (1997), pp. 317.
- [75] Reza Mansouri and Roman Sexl, *Gen. Rel. Grav.*, **8**, (1977), p. 809.
- [76] Reza Mansouri and Roman U Sexl, *Gen. Rel. Grav.*, **8(7)**, (1977), pp. 497.
- [77] Reza Mansouri and Roman U Sexl, *Gen. Rel. Grav.*, **8(7)**, (1977), pp. 515.
- [78] S. Merhab, *Aerospace Sensor Systems and Applications* (Springer, New York, 1996).
- [79] A. A. Michelson, *Philos. Mag*, **8(56)**, (1904), p. 716.
- [80] E. Minguzzi, *Found. Phys. Lett.*, **15(2)**, (2002), pp. 153, available at arXiv:gr-qc/0103049 v3.
- [81] E. Minguzzi, *The Gauge Nature of Simultaneity*, arXiv:gr-qc/0204063 (April 2002).
- [82] Charles W. Misner, Kip S. Thorne and J. A. Wheeler, *Gravitation* (W. H. Freeman, San Fransisco, 1972).
- [83] C. Møller, *The Theory of Relativity*, second edition edn. (Oxford University Press, New Delhi, 1972).
- [84] M. Yamamoto N. Saburi and K. Harada, *IEEE Trans. Instr. Meas.*, **IM-25**, (1976), pp. 473.

- [85] C. Nissim-Sabat, *Am. J. Phys.*, **50**, (1982), p. 533.
- [86] G. Petit and G. Wolf, *Astron. Astrophys.*, **286**, (1994), pp. 971.
- [87] B. W. Petley, *Contemp. Phys.*, **21**, (1980), p. 607.
- [88] Jr. T. E. Phipps, *NOLTR*, **47**, (1973), pp. 73.
- [89] B. Pogany, *Ann. der Phys.*, **80**, (1926), p. 217.
- [90] B. Pogany, *Naturwissenschaften*, **15**, (1927), p. 177.
- [91] B. Pogany, *Ann. der Phys.*, **85**, (1928), p. 244.
- [92] H. Poincaré, *The Value of Science* (Dover, New York, 1958).
- [93] E. J. Post, *Sagnac Effect*, *Rev. Mod. Phys.*, **39**, (1967), p. 475.
- [94] J. R. Pounder, *Comm. Dublin Institute for Advanced Studies A*, **11**.
- [95] H. Reichenbach, *The Philosophy of Space and Time*, 2nd edn. (Dover, New York, 1957).
- [96] R. Resnick, *Introduction to Special Relativity* (John Wiley and Sons (Asia), Singapore, 1998).
- [97] F. Riehle, Th. Kister, A. Wittie, J. Helmcke and ch. J. Borde, *Phys. Rev. Lett.*, **67**, (1991), pp. 177.
- [98] G. Rizzi and A. Serafini, *Synchronization and Desynchronization in Rotating Platforms*, in G. Rizzi and M. L. Ruggiero, eds., *Relativity in Rotating Frames*, Foundations of Physics (Kluwer Academic, Dordrecht, 2004), series Editor: A. van der Merwe.
- [99] G. Rizzi and A. Tartaglia, *Found. Phys.*, **28**, (1998), pp. 1663.

- [100] G. Rizzi and A. Tartaglia, *Found. Phys. Lett.*, **12**(2), (1999), pp. 179.
- [101] A. A. Robb, *A Theory of Time and Space* (Cambridge: The University Press, Cambridge, 1914).
- [102] Rodrigues and Sherif, *Found. Phys.*, **31**, (2001), pp. 1767, math-ph/0302008, 4 Feb 2003.
- [103] A. H. Rosenthal, *J. Opt. Soc. Am.*, **52**, (1962), p. 1143.
- [104] Robert Rynasiewicz, *Is Simultaneity Conventional Despite Malament's Result?*, Available at <http://philsci-archive.pitt.edu/archive/00000293>.
- [105] G. Sagnac, *Compte. Rendus.*, **141**, (1905), p. 1220.
- [106] G. Sagnac, *Comp. Rend. Acad. Sci.*, **157**, (1913), pp. 708.
- [107] G. Sagnac, *Compt. Rend.*, **157**, (1913), p. 1410.
- [108] G. Sagnac, *J. Phys. (Paris)*, **4**, (1914), p. 177.
- [109] G. Sagnac, *J. Phys. Radium Ser.*, **4**, (1914), pp. 177.
- [110] B. F. Schutz, *A first course of General Relativity* (Cambridge University Press, Cambridge, 1987).
- [111] F. Selleri, *Found. Phys.*, **26**, , pp. 641.
- [112] F. Selleri, *Found. Phys. Lett.*, **10**, (1997), pp. 73.
- [113] F. Selleri, in F. Selleri, ed., *Open Question in Relativistic Physics*, pp. 69–80 (Apeiron, Montreal, 1998).
- [114] F. Selleri, *Found. Phys. Lett.*, **17**, (2004), pp. 599.

- [115] F. Selleri, *Sagnac Effect: End of a Mystery*, in G. Rizzi and M. L. Ruggiero, eds., *Relativity in Rotating Frame*, Fundamental Theories of Physics (Kluwer Academic, New York, 2004), series Editor: A. van der Merwe.
- [116] C. W. Sherwin, *Three Theories of Relative Measurement* (Physical Interpretation of Relativity Theory Meeting (III), Imperial College, London, 1992).
- [117] T. Sjödin, *Il Nuovo Cimento B*, **51**, (1979), pp. 229.
- [118] Yu. I. Sokolovsky, *The Special Theory of Relativity* (Hindustan Publishing, New Delhi, 1962).
- [119] G. Spinelli, *Il Nuovo Cimento B*, **75**, (1983), p. 11.
- [120] J. Stachel, *Einstein and the Rigidly Rotating Disk*, in A. Held, ed., *General Relativity and Gravitation: One Hundred Years after the Birth of Albert Einstein*, vol. I, pp. 1–15 (Plenum, New York).
- [121] G. E. Stedman, *Contemp. Phys.*, **26**, (1985), p. 311.
- [122] J. L. Synge, *Studies in Mathematics and Mechanics: Presented to Richard von Mises by Friends, Colleagues and Pupils* (1954), New York.
- [123] F. Tangherlini, *Nuovo Cimento Suppl.*, **20**, (1961), pp. 1.
- [124] A. Tartaglia, *Phys. Rev. D*, **58**, (1998), p. 064009.
- [125] A. Tartaglia, *Found. Phys. Lett.*, **12**(1), (1999), pp. 17.
- [126] A. Tartaglia and M. L. Ruggiero, *Sagnac Effect and pure geometry*, gr-qc/0401005v1 (January 2004).

- [127] F. F. Taylor and J. A. Wheeler, *Space-time Physics* (Freeman, San Francisco, 1963).
- [128] Roberto Torretti, *Relativity and Geometry* (Pergamon Press, Oxford, 1983).
- [129] B. Townsend, *Am. J. Phys.*, p. 1092.
- [130] V. A. Ugarov, *Special Theory of Relativity* (Mir Publisher, Moscow, 1979), translated from Russian by Yuri Atanov.
- [131] A. Ungar, *Phil. Sci.*, **53**, (1986), pp. 395.
- [132] A. Ungar, *Am. J. Phys.*, **56**(9), (1988), p. 814.
- [133] V. Vali, R. W. Shorthill and M. F. Berg, *Appl. Opt.*, **16**, (1977), p. 2605.
- [134] V. Varićak, *Phys. Z.*, **12**, (1911), p. 169.
- [135] V. Vyschskii *et al.*, *Phys. Usp.*, **62**, (1994), p. 289.
- [136] G. Schiffner W. R. Leeb and E. Scheiterer, *Appl. Opt.*, **18**, (1979), p. 1293.
- [137] R. Wang, Yi. Zheng, Aiping Yao and D. Langley, *Phys. Lett. A*, **312**, (2003), pp. 7.
- [138] T. A. Weber, *Am. J. Phys.*, **65**, (1997), pp. 486.
- [139] S. Weinberg, *Gravitation and Cosmology: Principles and Applications of the General Theory of Relativity* (John Wiley and Sons (Asia), Singapore, 2004), first Published in 1974.
- [140] D. H. Weinstein, *Nature*, **232**, (1971), p. 548.
- [141] S. A. Werner, *Phys. Today*, **33**, (1980), p. 24.

-
- [142] J. R. Wilkinson, *Ring Lasers, Prog. Quant. Electr.*, **11**, (1987), pp. 1.
- [143] A. Winnie, *Phil. Sc.*, **37**, (1970), pp. 81.
- [144] A. Winnie, *Phil. Sc.*, **37(2)**, (1970), p. 223.
- [145] E. Zahar, *British Journal of Philosophy of Science*, **28**, (1977), pp. 195.
- [146] J. E. Zimmerman, *Cryogenics*, **20**, (1980), p. 3.
- [147] J. E. Zimmerman and J. E. Mercereau, *Phys. Rev. Lett.*, **14**, (1965), p. 887.