

Bibliography

1. G. Berkeley "The Principles of Human Knowledge", Collins, London, 1967.
2. E. Mach "The Science of Mechanics", Open Court Publishing Company, La Salle, Illinois, 1960.
3. E. Kretschmann, *Ann. Physik.*, **55**, 1917, 575.
4. J.L. Anderson, *Gen. Rel. Grav.*, **2**, 1971, 161.
5. A. Trautman in "Cosmology and Gravitation", ed. P.G. Bergmann and V. de Sabatta, Plenum Press, New York and London, 1980.
6. N. Rosen, *Phys. Rev.* **57**, 1940, 147.
7. C. Møller, *Mat. Fys. Skr. Dan. Vid. Selsk.*, **1**, No.10, 1961.
8. D. T. Finkbeiner II "Introduction to Matrices and Linear Transformations", Freeman, San Francisco and London, 1960.
9. G. Birkhoff and S. Maclane "A Survey of Modern Algebra", MacMillan, New York, 1961.
10. P. R. Halmos "Finite-Dimensional Vector Spaces", Van Nostrand, 1958.
11. I. D. Macdonald "The Theory of Groups", Oxford, 1968.
12. I. N. Herstein "Topics in Algebra", Blaisdell, 1964.
13. R. P. Geroch "Mathematical Physics", University of Chicago Press, 1985.
14. J. L. Kelley "General Topology", Van Nostrand Reinhold, 1955.
15. J. Dugundji "Topology", Allyn and Bacon, 1974.
16. M. Eisenberg "Topology", Holt, Reinhart and Winston, 1974.
17. I. M. Singer and J.A. Thorpe "Lecture Notes on Elementary Topology and Geometry", Scott, Foresman and Co., 1967.
18. J. A. Wolf "Spaces of Constant Curvature", Publish or Perish, 1974.
19. F. Brickell and R. S. Clark "Differentiable Manifolds", Van Nostrand, 1970.
20. S. Kobayashi and K. Nomizu "Foundations of Differential Geometry" Vol.I, Interscience, New York, 1963.
21. R. Abraham, J. E. Marsden and T. Ratiu "Manifolds, Tensor Analysis and Applications", Springer, 2nd ed., 1988.
22. M. Spivak "Differential Geometry" Vol.1, Publish or Perish, 1970.
23. M. Spivak "Calculus on Manifolds", Benjamin, 1965.
24. D. Martin "Manifold Theory", Ellis Horwood, 1991.
25. W. M. Boothby "An Introduction to Differentiable Manifolds and Riemannian Geometry", John Wiley, 1986.

- nian Geometry", Academic Press, 1975.
26. H. Whitney, *Ann. Maths.*, **37**, 1936, 645.
 27. P. Stefan, *Proc. London Math. Soc.*, **29**, 1974, 699.
 28. R. Hermann, International Symposium on Nonlinear Differential Equations and Nonlinear Mechanics, Academic Press, New York, 1963, 325.
 29. P. Stefan, *J. London Math. Soc.*, **21**, 1980, 544.
 30. H. J. Sussmann, *Trans. Am. Math. Soc.*, **180**, 1973, 171.
 31. G. S. Hall and A. D. Rendall, *Int. Jn. Theor. Phys.*, **28**, 1989, 365.
 32. R. P. Geroch, *J. Math. Phys.* **9**, 1968, 1739.
 33. N. J. Hicks "Notes on Differential Geometry", Van Nostrand, 1971.
 34. C. von Westenholz "Differential Forms in Mathematical Physics", North Holland, 1981.
 35. L. P. Eisenhart "Riemannian Geometry", Princeton, 1966.
 36. P. J. Higgins "An Introduction to Topological Groups", Cambridge University Press, Cambridge, 1974.
 37. S. Sternberg "Lectures on Differential Geometry", Prentice-Hall, Englewood Cliffs, 1964.
 38. M. W. Hirsch and S. Smale "Differential Equations, Dynamical Systems, and Linear Algebra", Academic Press, 1974.
 39. R. S. Palais, *Mem. Am. Math. Soc. No. 22*, 1957.
 40. M. S. Capocci, MSc. Thesis, University of Aberdeen, 1992.
 41. J. Ehlers and W. Kundt in "Gravitation; an introduction to current research", ed. L. Witten, Wiley, New York, 1962, 49.
 42. R. Shaw *Quart. J. Math.*, Oxford, **20**, 1969, 333.
 43. R. Shaw and G. Bowtell *Quart. J. Math.*, Oxford, **20**, 1969, 497.
 44. R. Shaw *Quart. J. Math.*, Oxford, **21**, 1970, 101.
 45. J. F. Schell *J. Math. Phys.*, **2**, 1961, 202.
 46. A. Trautman and F. A. E. Pirani in "Lectures on General Relativity", Prentice Hall, Englewood Cliffs, 1965.
 47. R.K. Sachs *Proc. Roy. Soc. London*, **A264**, 1961, 309.
 48. S. W. Hawking and G. F. R. Ellis "The Large Scale Structure of Space-Time", Cambridge University Press, 1973.
 49. C. W. Misner, K. S. Thorne and J. A. Wheeler "Gravitation", Freeman, San Francisco, 1973.
 50. R. M. Wald "General Relativity", University of Chicago Press, Chicago, 1984.
 51. H. Stephani "General Relativity", Cambridge University Press, 1982.
 52. L. Markus, *Ann. Math.*, **62**, 1955, 411.
 53. R. Penrose "Techniques of Differential Topology in Relativity", SIAM, 1972.
 54. M. W. Hirsch, *Ann. Math.*, **73**, 1961, 566.
 55. H. Stephani, D. Kramer, M. A. H. MacCallum, C. Hoenselears and E. Herlt "Exact Solutions of Einstein's Field Equations", Cambridge University Press, 2003.
 56. J. G eh eniau and R. Debever, *Bull. Acad. Roy. Belg. Cl. des Sc.*, **42**, 1956, 114.

57. G. S. Hall, Banach Centre Publications, **12**, P.W.N. Warsaw, 1984, 53.
58. J. L. Synge, U. of Toronto Studies in *Appl. Math.*, **1**, 1935, 1.
59. J. L. Synge "Relativity: The Special Theory", North Holland, Amsterdam, 1956.
60. H. S. Ruse, *Proc. Lond. Math. Soc.*, **41**, 1936, 302.
61. F. de Felice and C. J. S. Clarke "Relativity on Curved Manifolds", Cambridge University Press, 1990.
62. A. Z. Petrov, *Sci. Not. Kazan State Univ.*, **114**, 1954, 55. (For an English translation see *Gen. Rel. Grav.* **32**, 2000, 1665.)
63. A. Z. Petrov "Einstein Spaces", Pergamon, 1969.
64. J. G eh eniau, *C.R. Acad. Sci. (Paris)*, **244**, 1957, 723.
65. L. Bel, *Cah. de Phys.*, **16**, 1962, 59.
66. R. Debever, *C.R. Acad. Sci. (Paris)*, **249**, 1959, 1744.
67. F. A. E. Pirani, *Phys. Rev.*, **105**, 1957, 1089.
68. R. Penrose, *Anns. Phys.*, **10**, 1960, 171.
69. R. Penrose and W. Rindler "Spinors and Space-Time", Cambridge University Press, 1986.
70. S. Bononas, *Gen. Rel. Grav.*, **21**, 1989, 953.
71. R. V. Churchill, *Trans. Amer. Math. Soc.*, **34**, 1932, 784.
72. J. F. Plebanski, *Acta. Phys. Polon.*, **26**, 1964, 963.
73. A. Lichnerowicz "Theories Relativistes de la Gravitation et de l'Electromagn etisme", Masson, Paris, 1955.
74. A. Zajtz, *Zeszyty, Naukowe Uniwersytetu, Jagiellonskiego LXXIV*, 1964.
75. G. Ludwig and G. Scanlon, *Comm. Math. Phys.*, **20**, 1971, 291.
76. R. Penrose, *Gravitatsya*, A. Z. Petrov Festschrift volume, Naukdumka, Kiev, 1972, 203.
77. C. D. Collinson and R. Shaw, *Int. J. Theor. Phys.*, **6**, 1972, 347.
78. G. S. Hall, *J. Phys. A*, **9**, 1976, 541.
79. W. J. Cormack and G. S. Hall, *J. Phys. A*, **12**, 1979, 55.
80. W. J. Cormack and G. S. Hall, *Int. J. Theor. Phys.*, **20**, 1981, 105.
81. R. F. Crade and G. S. Hall, *Acta Phys. Polon. B*, **13**, 1982, 405.
82. G. Sobczyk, *Acta. Phys. Polon. B*, **11**, 1980, 579.
83. C. B. G. McIntosh, J. M. Foyster and A. W-C. Lun, *J. Math. Phys.*, **22**, 1981, 2620.
84. G. C. Joly and M. A. H. MacCallum, *Class. Quant. Grav.*, **7**, 1990, 541.
85. G. S. Hall, Proceedings of the Relativity Workshop, Balatonsz eplak, Hungary, 1985, 49.
86. G. S. Hall, *Arch. Math.*, **4**, Scripta Fac. Sci. Nat. Ujep. Brunensis XVIII, 1982, 169.
87. G. S. Hall, *Arab. Jn. for Sci. and Eng.*, **9**, 1984, 87.
88. G. S. Hall and D. Negm, *Int. Jn. Theor. Phys.*, **25**, 1986, 405.
89. P. A. Goodinson and R. A. Newing, *J. Inst. Math. App.*, **6**, 1970, 212.
90. G. S. Hall, *J. Phys. A.*, **6**, 1973, 619.
91. G. S. Hall, *Class. Quant. Grav.*, **13**, 1996, 1479.
92. G. S. Hall "The Petrov Lectures", Proceedings of the School Volga, Kazan, Russia, 2000.

93. J. M. M. Senovilla and R. Vera, *Class. Quant. Grav.*, **16**, 1999, 1185.
94. G. S. Hall and S. Khan, unpublished work, 2000. See S. Khan, PhD. thesis, University of Aberdeen, 2001.
95. A. D. Rendall, *J. Math. Phys.*, **29**, 1988, 1569.
96. B. G. Schmidt, *Comm. Math. Phys.*, **29**, 1973, 55.
97. W. Ambrose and I. M. Singer, *Trans. Am. Math. Soc.*, **75**, 1953, 428.
98. H. Wu, *Illinois J. Math.*, **8**, 1964, 291.
99. A. Besse "Einstein Manifolds", Springer, 1987.
100. L. Berard Bergery and A. Ikemakhen, *Proceedings of Symposia in Pure Mathematics*, **54**, 1993, Part 2, 27.
101. G. S. Hall, *Gen. Rel. Grav.*, **20**, 1988, 399.
102. G. S. Hall, *J. Math. Phys.*, **32**, 1991, 181.
103. C. D. Collinson and P. N. Smith, *Gen. Rel. Grav.*, **19**, 1987, 95.
104. G. S. Hall, *Gen. Rel. Grav.*, **27**, 1995, 567.
105. R. Debever and M. Cahen, *Bull. Acad. Belg. Class. Sci.*, **47**, 1962, 491.
106. W. Beiglböck, *Zts. für Phys.*, **179**, 1964, 148.
107. G. S. Hall, *Lett. al. Nu. Cim.*, **9**, 1974, 667.
108. G. S. Hall and W. Kay, *J. Math. Phys.*, **29**, 1988, 428.
109. J. N. Goldberg and R. P. Kerr, *J. Math. Phys.*, **2**, 1961, 327.
110. R. P. Kerr and J. N. Goldberg, *J. Math. Phys.*, **2**, 1961, 332.
111. G. S. Hall and D. P. Lonie, *Class. Quant. Grav.*, **17**, 2000, 1369.
112. R. Ghanam and G. Thompson, *Class. Quant. Grav.*, **18**, 2001, 2007.
113. C. B. G. McIntosh and E. Van Leeuwen, *J. Math. Phys.*, **23**, 1982, 1149.
114. A. G. Walker, *Quart. J. Maths. Oxford*, **20**, 1949, 135.
115. H. S. Ruse, *Quart. J. Maths. Oxford*, **20**, 1949, 218.
116. A. G. Walker, *Quart. J. Maths. Oxford* (2), **1**, 1950, 69.
117. E. M. Patterson, *Quart. J. Maths. Oxford* (2), **2**, 1951, 151.
118. G. S. Hall and C. B. G. McIntosh, *Int. J. Theor. Phys.*, **22**, 1983, 469.
119. G. S. Hall, *Gen. Rel. Grav.*, **15**, 1983, 581.
120. H. W. Brinkmann, *Math. Ann.*, **94**, 1925, 119.
121. G. S. Hall in "Classical General Relativity", ed. W.B. Bonnor, J. N. Islam and M. A. H. MacCallum, Cambridge University Press, 1984, 103.
122. N. Rosen, *Anns. Phys.*, **22**, 1963, 1.
123. G. S. Hall, unpublished manuscript of lecture at the Fourth Meeting on Mathematical Physics at the University of Coimbra, Portugal, 1984.
124. G. S. Hall and A. D. Rendall, *J. Math. Phys.*, **28**, 1987, 1837.
125. E. Ihrig, *Gen. Rel. Grav.*, **7**, 1976, 313.
126. G. S. Hall, *Gen. Rel. Grav.*, **16**, 1984, 79.
127. J. A. Thorpe, *J. Math. Phys.*, **10**, 1969, 1.
128. R. S. Kulkarni, *Ann. Maths.*, **91**, 1970, 311.
129. B. Ruh, PhD. Thesis, E.T.H. Zurich, 1982.
130. B. Ruh, *Math. Z.*, **184**, 1985, 371.
131. R.S. Kulkarni, *Int. J. Math. and Math. Sci.*, **1**, 1978, 137.
132. G. S. Hall and A. D. Rendall, *Gen. Rel. Grav.*, **19**, 1987, 771.
133. G. S. Hall, 1978, unpublished.
134. G. S. Hall, *Z. Naturforsch.*, **33a**, 1978, 559.

135. G. S. Hall in Proceedings of the First Hungarian Relativity Workshop, ed. Z. Perjés, Balatonszéplak, 1985, 141.
136. G. S. Hall, A. D. Hossack and J. R. Pulham, *J. Math. Phys.*, **33**, 1992, 1408.
137. O. Kowalski, *Math. Zts.*, **125**, 1972, 129.
138. E. Ihrig, *J. Math. Phys.*, **16**, 1975, 54.
139. E. Ihrig, *Int. J. Theor. Phys.*, **14**, 1975, 23.
140. C. B. G. McIntosh and D. W. Halford, *J. Phys. A*, **14**, 1981, 2331.
141. A. D. Rendall, *Class. Quant. Grav.*, **5**, 1988, 695.
142. A. D. Rendall, *Jn. Geom. Phys.*, **6**, 1989, 159.
143. S. B. Edgar, *J. Math. Phys.*, **32**, 1991, 1011.
144. C. D. Collinson in "Galaxies, Axisymmetric Systems and Relativity", ed. M. A. H. MacCallum, Cambridge University Press, 1985.
145. S. B. Edgar, *J. Math. Phys.*, **33**, 1992, 3716.
146. G. Marmo, C. Rubano and G. Thompson, *Class. Quant. Grav.*, **7**, 1990, 2155.
147. G. Thompson, *Class. Quant. Grav.*, **10**, 1993, 2035.
148. G. K. Martin and G. Thompson, *Pac. J. Maths.*, **158**, 1993, 177.
149. J. K. Beem and P. E. Parker, *J. Math. Phys.*, **31**, 1990, 819.
150. G. S. Hall and A. D. Hossack, *J. Math. Phys.*, **34**, 1993, 5897.
151. E. Cartan "Leçons sur la Geometrie des Espaces de Riemann", Gauthier-Villars, Paris, 1946.
152. J. Ehlers in "E.B. Christoffel", ed. P.L. Butzer and F. Fehér, Birkhauser, Basel, 1981.
153. A. Karlhede, *Gen. Rel. Grav.*, **12**, 1980, 693.
154. A. Karlhede, *Gen. Rel. Grav.*, **12**, 1980, 963.
155. A. Karlhede and M.A.H. MacCallum, *Gen. Rel. Grav.*, **14**, 1982, 673.
156. M. P. Machado Ramos and J.A.G. Vickers, *Class. Quant. Grav.*, **13**, 1996, 1579.
157. M. P. Machado Ramos and J.A.G. Vickers, *Class. Quant. Grav.*, **13**, 1996, 1589.
158. K. Yano. 'The Theory of Lie Derivatives and its Applications', North Holland Amsterdam 1957.
159. W. Poor 'Differential Geometric Structures', McGraw Hill, 1981.
160. G. S. Hall. *Gen. Rel. Grav.*, **20** 1988, 671.
161. G. S. Hall, D. J. Low and J. R. Pulham. *J. Math. Phys.*, **35** 1994, 5930.
162. R. F. Crade and G. S. Hall. *Phys. Lett.* **75A** 1979, 17.
163. R. H. Boyer. *Proc. Roy. Soc. A* 311, 1969, 245.
164. D. Alexeevski. *Anns. Glob. Anal. and Geom.* **3** 1985, 59.
165. J. K. Beem *Letts. Math. Phys.* **2** 1978, 317.
166. G. S. Hall *J. Math. Phys.* **31** 1990, 1198.
167. G. S. Hall. *Class. Quant. Grav.* **20** 2003, 3745.
168. W. L. Chow. *Math. Ann.* **117** 1939, 98.
169. K. Nomizu. *Ann. Maths.* **72** 1960, 105.
170. G. S. Hall. *Class. Quant. Grav.* **6** 1989, 157.
171. B. G. Schmidt. PhD. thesis, University of Hamburg 1968.

172. G. S. Hall and J. da Costa. *J. Math. Phys.* **29** 1988, 2465.
173. M. P. Ryan and L. C. Shepley. 'Homogeneous Relativistic Cosmologies' Princeton University Press, 1975.
174. B. O. J. Tupper. *Class. Quant. Grav.* **13** 1996, 1679.
175. G. S. Hall. *Gen. Rel. Grav.* **32** 2000, 933.
176. D. Garfinkle. *J. Math. Phys.* **28** 1987, 28.
177. R. Maartens and S. D. Maharaj. *Class. Quant. Grav.* **3** 1986, 1005.
178. D. M. Eardley. *Comm. Math. Phys.* **37** 1974, 287.
179. M. L. Bedran and B. Lesche. *J. Math. Phys.* **27** 1986, 2360.
180. B. Lesche and M. L. Bedran. *Revista. Brasileira de Física* **18** 1988, 93.
181. R. Maartens. *J. Math. Phys.* **28** 1987, 2051.
182. C. D. Collinson. *J. Math. Phys.* **29** 1988, 1972.
183. S. A. Hojman. *J. Math. Phys.* **32** 1991, 234.
184. B. G. Schmidt. *Z. Naturforsch.* **220** 1967, 1351.
185. B. G. Schmidt. *Gen. Rel. Grav.* **2** 1971, 105.
186. R. Sigal. *Gen. Rel. Grav.* **5** 1974, 737.
187. K. Yano and T. Nagano. *Japan J. Math.* **29** 1959, 173.
188. C. B. G. McIntosh. *Gen. Rel. Grav.* **7** 1976, 199.
189. C. B. G. McIntosh. *Phys. Letts.* **69A** 1978, 1.
190. D. Kramer. *J. Phys. A.* **13** 1980, L43.
191. W. D. Halford and R. P. Kerr. *J. Math. Phys.* **21** 1980, 120.
192. W. D. Halford and R. P. Kerr. *J. Math. Phys.* **21** 1980, 129.
193. A. W-C. Lun., C. B. G. McIntosh and D. B. Singleton. *Gen. Rel. Grav.* **20** 1988, 745.
194. M. L. Wooley. *Comm. Math. Phys.* **31** 1973, 75.
195. J. R. Ray and E. L. Thompson. *J. Math. Phys.* **16** 1975, 345.
196. B. Coll. *C. R. Acad. Sci. Paris A* **280** 1975, 1773.
197. H. Michalski and J. Wainwright. *Gen. Rel. Grav.* **6** 1975, 289.
198. J. Wainwright and P. E. A. Yaremovich. *Gen. Rel. Grav.* **7** 1976, 345.
199. J. Wainwright and P. E. A. Yaremovich. *Gen. Rel. Grav.* **7** 1976, 595.
200. M. L. Wooley. *J. Phys. A* **10** 1977, 2107.
201. C. B. G. McIntosh. *Gen. Rel. Grav.* **9** 1978, 277.
202. C. B. G. McIntosh. *Gen. Rel. Grav.* **10** 1979, 61.
203. M. A. H. MacCallum and N. van den Burgh in 'Galaxies, Axisymmetric Systems and Relativity' ed. M. A. H. MacCallum, C. U. P. 1985, 138.
204. G. S. Hall and J. P. Steele. *Gen. Rel. Grav.* **22** 1990, 457.
205. G. S. Hall and M. T. Patel. Preprint, University of Aberdeen 2003.
206. H. P. Robertson and T. W. Noonan "Relativity and Cosmology", Saunders 1969.
207. G. Fubini. *Annali di Matematica* **8** 1903, 39
208. Y. Choquet-Bruhat, C. De-Witt-Morette with M. Dillard-Bleick "Analysis, Manifolds and Physics", North-Holland, 1982.
209. G. S. Hall and J. D. Steele *J. Math. Phys.*, **32**, 1991, 1847.
210. G. S. Hall, M. Capocci and R. Beig *Class. Quant. Grav.* **14**, 1997, L49.
211. E. Nelson "Topics in Dynamics; I Flows", Princeton University and University of Tokyo Press, Princeton, 1969.

212. R. F. Bilyalov, *Sov. Phys.*, **8**, 1964, 878.
213. T. Siguri and S. Ueno *Tensor. N. S.*, **24**, 1972, 253.
214. L. Defrise-Carter *Comm. Math. Phys.*, **40**, 1975, 273.
215. R. Beig, preprint, University of Vienna, 1992.
216. M. S. Capocci *Class. Quant. Grav.*, **16**, 1999, 927.
217. C. D. Collinson and D. C. French *J. Math. Phys.*, **8**, 1967, 701.
218. H. Salazar, A. Garcia D and J.F. Plebanski *J. Math. Phys.*, **24**, 1983, 2191.
219. R. Maartens and S.D. Maharaj *Class. Quant. Grav.*, **8**, 1991, 503.
220. R. Sippel and H. Goenner *Gen. Rel. Grav.*, **18**, 1986, 1229.
221. M. S. Capocci and G. S. Hall *Gravitation and Cosmology*, **3**, 1997, 1.
222. A. A. Coley and B. O. J. Tupper *J. Math. Phys.*, **30**, 1989, 2616.
223. A. A. Coley and B. O. J. Tupper *J. Math. Phys.*, **33**, 1992, 1754.
224. D. Garfinkle and Q. Tian *Class. Quant. Grav.*, **4**, 1987, 137.
225. D. Eardley, J. Isenberg, J. Marsden and V. Moncrief *Comm. Math. Phys.*, **106**, 1986, 137.
226. R. Maartens and C.M. Mellin *Class. Quant. Grav.*, **13**, 1996, 1571.
227. J. Lewandowski *Class. Quant. Grav.*, **7**, 1990, L135.
228. R. Maartens and S.D. Maharaj *J. Math. Phys.*, **31**, 1990, 151.
229. G. S. Hall *Gen. Rel. Grav.*, **22**, 1990, 203.
230. J. Carot *Gen. Rel. Grav.*, **22**, 1990, 1135.
231. K. Yano "Integral formulas in Riemannian Geometry", Marcel Dekker, New York, 1970.
232. G. S. Hall and I. M. Roy *Gen. Rel. Grav.*, **29**, 1997, 827.
233. G. S. Hall and D. P. Lonie *Class. Quant. Grav.*, **12**, 1995, 1007.
234. A. Barnes *Class. Quant. Grav.*, **10**, 1993, 1139.
235. G. S. Hall in *Proc. 6th Int. Conf. on Differential Geometry and its Applications*, Masaryk University, Brno, Czech. Republic, 1996.
236. G. S. Hall *Class. Quant. Grav.*, **17**, 2000, 3073.
237. G. S. Hall and S. Khan *J. Math. Phys.*, **42**, 2001, 347.
238. G. S. Hall *Class. Quant. Grav.*, **17**, 2000, 4637.
239. G. F. R. Ellis "Relativistic Cosmology" in "General Relativity and Cosmology", Academic Press, New York, 1971.
240. G. S. Hall and M. T. Patel *Class. Quant. Grav.*, **19**, 2002, 2319.
241. A. A. Coley and D. J. McManus *Class. Quant. Grav.*, **11**, 1994, 1261.
242. G. S. Hall and D. P. Lonie. Preprint, University of Aberdeen, 2004.
243. A. V. Aminova *J. Soviet. Maths.*, **55**, 1991, 1995.
244. G. H. Katzin, J. Levine and W. R. Davies. *J. Math. Phys.* **10** 1969, 617.
245. G. S. Hall and J. da Costa. *J. Math. Phys.* **32** 1991, 2848.
246. G. S. Hall and J. da Costa. *J. Math. Phys.* **32** 1991, 2854.
247. C. B. G. McIntosh and D. W. Halford. *J. Math. Phys.* **23** 1982, 436.
248. P. C. Aichelburg. *J. Math. Phys.* **11** 1970, 2485.
249. C. D. Collinson. *J. Math. Phys.* **11** 1970, 818.
250. N. Tariq and B. O. J. Tupper. *Tensor.* **31** 1997, 42.
251. W. D. Halford, C. B. G. McIntosh and E. H. van Leeuwen. *J. Math. Phys.* **13** 1980, 2995.
252. C. D. Collinson and E. G. L. R. Vaz. *Gen. Rel. Grav.* **14** 1982, 5.

253. E. G. L. R. Vaz. and C. D. Collinson. *Gen. Rel. Grav.* **15** 1983, 661.
 254. R. A. Tello-Llanos. *Gen. Rel. Grav.* **20** 1988, 765.
 255. J. Carot and J. da Costa. *Gen. Rel. Grav.* **23** 1991, 1057.
 256. A. H. Bokhari, A. R. Kashif and A. Qadir. *J. Math. Phys.* **41** 2000, 2167.
 257. G. S. Hall and G. S. Shabbir. *Class. Quant. Grav.* **18** 2001, 907.
 258. G. S. Hall and G. S. Shabbir. *Gravitation and Cosmology* **9** 2003, 134.
 259. J. Carot, J. da Costa. and E. L. G. R. Vaz. *J. Math. Phys.* **35** 1994, 4832.
 260. G. S. Hall, I. Roy and E. L. G. R. Vaz. *Gen. Rel. Grav.* **28** 1996, 299.
 261. J. Carot, L. A. Nunez and U. Percoco. *Gen. Rel. Grav.* **29** 1997, 1223.
 262. J. Carot and J. da Costa. *Fields Institute Communications* **15** 1997, 179.
 263. A. Qadir and M. Ziad. *Nu. Cim.* **113B** 1998, 773.
 264. G. Contreras, L. A. Nunez and U. Percoco. *Gen. Rel. Grav.* **32** 2000, 285.
 265. M. Tsamparlis and P. S. Apostolopoulos. *Gen. Rel. Grav.* **32** 2000, 281.
 266. U. Camci and A. Barnes. *Class. Quant. Grav.* **19** 2002, 393.
 267. M. Sharif and S. Aziz. *Gen. Rel. Grav.* **35** 2003, 1093.