- For quantum non-demolition measurements see Caves, Thorne, Drever, Sandberg and Zimmermann (1980) and Braginsky and Kalili (1992). For application to advanced interferometers see Kimble, Levin, Matsko, Thorne and Vyatchanin (2000) and Buonanno and Chen (2001a, 2001b, 2002). For a review of quantum noise in GW interferometers see Corbitt and Mavalvala (2004).
- The effect of seismic noise in GW interferometers is discussed in Saulson (1994), Chapter 8. Newtonian noise are studied in Saulson (1984) and Beccaria *et al.* (1998). Our discussion of thermal noise followed the internal VIRGO note Flaminio *et al.* (2005), where calculations of the various thermal noise are performed in detail. Thermo-elastic noise is discussed in Braginsky and Vyatchanin (2003).
- Updated information on the existing GW interferometers, as well as technical documents, PhD theses, etc. can be found at
  http://www.ligo.caltech.edu/ (LIGO)
  http://wwwcascina.virgo.infn.it/ (VIRGO)
  http://www.geo600.uni-hannover.de/ (GEO600)
  http://tamago.mtk.nao.ac.jp/ (TAMA)
- A detailed description of the LISA mission can be found in the LISA Pre-Phase A Report (1998). See also the reviews Bender (2001), Danzmann and Rüdiger (2003), and the web site http://lisa.jpl.nasa.gov.
- For lack of space, we have not discussed experiments searching for GWs using the Doppler tracking of spacecraft. For a recent review, see Armstrong (2006).

Bibliography

Abbott, B. *et al.* [LIGO Science Community, LSC] (2004a). *Phys. Rev. D* **69**, 082004.
Abbott, B. *et al.* [LSC] (2004b). *Phys. Rev. D* **69**, 102001.
Abbott, B. *et al.* [LSC] (2004c). *Phys. Rev. D* **69**, 122001.
Abbott, B. *et al.* [LSC] (2004d). *Phys. Rev. D* **69**, 122004.
Abbott B. *et al.* [LSC] (2005a). *Phys. Rev. D* **72**, 082001.
Abbott, B. *et al.* [LSC] (2005b). *Phys. Rev. Lett.* **94** 181103.
Abbott, B. *et al.* [LSC] (2005c). *Phys. Rev. Lett.* **95**, 221101.
Abramowitz, M. and I. A. Stegun (1972). *Handbook of Mathematical Functions*, Dover, New York.
Aguiar, O. D. *et al.* (2004). *Class. Quant. Grav.* **21**, S457.
Allen, Z. A. *et al.* [IGEC] (2000). *Phys. Rev. Lett.* **85**, 5046 .
Allen, B. and J. D. Romano (1999). *Phys. Rev. D* **59**, 102001.
Anderson, W. G. and R. Balasubramanian (1999). *Phys. Rev. D* **60**, 102001.
Anderson, W. G., P. R. Brady, J. D. E. Creighton and E. E. Flanagan (2001). *Phys. Rev. D* **63**, 042003.
de Andrade, V. C., L. Blanchet and G. Faye (2001). *Class. Quant. Grav.* **18**, 753.
Apostolatos, T. A., C. Cutler, G. J. Sussman and K. S. Thorne (1994). *Phys. Rev. D* **49**, 6274.
Arnaud, N. *et al.* (2005). *Nucl. Instr. Meth. A* **550**, 467.
Arnowitt, R., S. Deser and C. W. Misner (1961). *Phys. Rev.* **121**, 1556.
Arkani-Hamed, N., H. Georgi and M. D. Schwartz (2003). *Ann. Phys.* **305**, 96.
Arkani-Hamed, N., H. C. Cheng, M. A. Luty and S. Mukohyama (2004). *JHEP* **0405**, 074.
Armstrong, J. W. (2006). *Living Rev. Relativity* **9**, 1. Online article http://www.livingreviews.org/lrr-2006-1.
Arun, K. G., L. Blanchet, B. R. Iyer and M. S. Qusailah (2004). *Class. Quant. Grav.* **21**, 3771. [Erratum-ibid. **22**, (2005) 3115].
Ashby, N. and J. Dreitlein (1975). *Phys. Rev. D* **12**, 336.
Astone, P., *et al.* [ROG] (1997b). *Astroparticle Phys.* **7**, 231.
Astone, P., *et al.* [ROG] (2002). *Phys. Rev. D* **65**, 022001.
Astone, P., *et al.* [IGEC] (2003a). *Phys. Rev. D* **68**, 022001
Astone, P., *et al.* [IGEC-2] (2007). arXiv:0705.0688[gr-qc].
Astone, P., *et al.* [ROG] (2003b). *Phys. Rev. Lett.* **91**, 111101.
Backer, D. C. and R. W. Hellings (1986). *Ann. Rev. Astron. Astrophys.*

24, 537.
Bardeen, J. M. and W. H. Press (1973). *J. Math. Phys.* **14**, 7.
Bassan, M. (2002). In *Proceeding of the 15th International Conference on General Relativity and Gravitation*, M. Francaviglia ed., World Scientific, Singapore.
Beccaria, M. *et al.* (1998). *Class. Quant. Grav.* **15**, 3339.
Belczynski, K., R. E. Taam, V. Kalogera, F. A. Rasio and T. Bulik (2006). arXiv:astro-ph/0612032.
Bender, P. L. (2001). In *Gravitational Waves*, I. Ciufolini *et al.* eds, IoP Publishing, Bristol.
van den Berg, J. C. ed. (1999). *Wavelets in Physics.* Cambridge University Press, Cambridge.
Bertotti, B. and A. M. Anile (1973). *Astron. Astrophys.* **28**, 429.
Bianchi, M., E. Coccia, C. N. Colacino, V. Fafone and F. Fucito (1996). *Class. Quant. Grav.* **13**, 2865.
Bianchi, M., M. Brunetti, E. Coccia, F. Fucito, and J. A. Lobo (1998). *Phys. Rev. D* **57**, 4525.
Binney, J. and M. Merrifield (1998). *Galactic Astronomy.* Princeton University Press, Princeton.
Binney, J. and S. Tremaine (1994). *Galactic Dynamics.* Princeton University Press, Princeton.
Black E. D. (2001). *Am. J. Phys.* **69**, 79.
Black E. D. and R. N. Gutenkunst (2003). *Am. J. Phys.* **71**, 365.
Blair, D., *et al.* (1995). *Phys. Rev. Lett.* **74**, 1908.
Blanford, R. D. and S. A. Teukolsky (1976). *Astrophys. J.* **205**, 580.
Blanchet, L. (1987). *Proc. Roy. Soc. Lond. A* **409**, 383.
Blanchet, L. (1993). *Phys. Rev. D* **47**, 4392.
Blanchet, L. (1995). *Phys. Rev. D* **51**, 2559.
Blanchet, L. (1996). *Phys. Rev. D* **54**, 1417.
Blanchet, L. (1997). *Phys. Rev. D* **55**, 714.
Blanchet, L. (1998a). *Class. Quant. Grav.* **15**, 89.
Blanchet, L. (1998b). *Class. Quant. Grav.* **15**, 113.
Blanchet, L. (1998c). *Class. Quant. Grav.* **15**, 1971.
Blanchet, L. (2006). *Living Rev. Relativity* **9**, 4. Online article http://www.livingreviews.org/lrr-2006-4.
Blanchet, L. and T. Damour (1986). *Phil. Trans. R. Soc. London* **A320**, 379.
Blanchet, L. and T. Damour (1988). *Phys. Rev. D* **37**, 1410.
Blanchet, L. and T. Damour (1989). *Ann. Inst. H. Poincaré* **50**, 377.
Blanchet, L. and G. Schäfer (1989). *Mon. Not. R. Astron. Soc.* **239**, 845.
Blanchet, L. and T. Damour (1992). *Phys. Rev. D* **46**, 4304.
Blanchet, L. and G. Schäfer (1993). *Class. Quant. Grav.* **10**, 2699.
Blanchet, L., T. Damour and B. R. Iyer (1995). *Phys. Rev. D* **51**, 5360. [Erratum-ibid. *D* **54**, (1996) 1860].
Blanchet, L. and B. S. Sathyaprakash (1995). *Phys. Rev. Lett.* **74**, 1067.
Blanchet, L., B. R. Iyer, C. M. Will and A. G. Wiseman (1996). *Class. Quant. Grav.* **13**, 575.

Blanchet, L., G. Faye and B. Ponsot (1998). *Phys. Rev. D* **58**, 124002.
Blanchet, L. and G. Faye (2001). *Phys. Rev. D* **63**, 062005.
Blanchet, L., B. R. Iyer and B. Joguet (2002). *Phys. Rev. D* **65**, 064005. [Erratum-ibid. *D* **71**, 129903 (2005)]
Blanchet, L., G. Faye, B. R. Iyer and B. Joguet (2002). *Phys. Rev. D* **65**, 061501. [Erratum-ibid. *D* **71**, 129902 (2005)].
Blanchet L. and B. R. Iyer (2003). *Class. Quant. Grav.* **20**, 755.
Blanchet, L., T. Damour and G. Esposito-Farèse (2004). *Phys. Rev. D* **69**, 124007.
Blanchet, L., T. Damour, G. Esposito-Farèse and B. R. Iyer (2004). *Phys. Rev. Lett.* **93**, 091101.
Blanchet, L., T. Damour, G. Esposito-Farèse and B. R. Iyer (2005). *Phys. Rev. D* **71**, 124004.
Blanchet, L., G. Faye, and S. Nissanke (2005). *Phys. Rev. D* **72**, 044024.
Blanchet, L., A. Buonanno and G. Faye (2006). *Phys. Rev. D* **74**, 104034.
Bonazzola, S. and E. Gourgoulhon (1996). *Astron. Astrophys.* **312**, 675.
Bondarescu, M. and K. S. Thorne (2006). *Phys. Rev. D* **74**, 082003.
Bondi, H., M. G. J. van der Burg and A. K. W. Metzner (1962). *Proc. Roy. Soc. London A* **269**, 21.
Bondu, F. (2003). VIRGO internal note VIR-NOT-OCA-1390-243, unpublished.
Bontz R.J. and M.P. Haugan (1981). *Astrophysics and Space Science* **78**, 199.
Boulware, D. G. and S. Deser (1972). *Phys. Rev. D* **6**, 3368.
Brady, P. R., T. Creighton, C. Cutler and B. F. Schutz (1998). *Phys. Rev. D* **57**, 2101.
Brady, P. R. and T. Creighton (2000). *Phys. Rev. D* **61**, 082001.
Braginsky, V. B. and L. P. Grishchuk (1986). *Sov. Phys. JETP* **62**, 427.
Braginsky, V. B. and K. S. Thorne (1987). *Nature* **327**, 123.
Braginsky, V. B. and F. Ya. Kalili (1992). *Quantum Measurement.* Cambridge University Press, Cambridge.
Braginsky, V. B. and S. P. Vyatchanin (2003). *Phys. Lett. A* **312**, 244.
Briant, T., *et al.* (2003). *Phys. Rev. D* **67**, 102005.
Bruhat, Y. (1962). In *Gravitation: An Introduction to Current Research*, L. Witten ed., Wiley, New York.
Buonanno, A. and Y. B. Chen (2001a). *Phys. Rev. D* **64**, 042006.
Buonanno, A. and Y. B. Chen (2001b). *Class. Quant. Grav.* **18**, L95.
Buonanno, A. and Y. B. Chen (2002). *Phys. Rev. D* **65**, 042001.
Buonanno, A., Y. B. Chen and M. Vallisneri, (2003). *Phys. Rev. D* **67**, 024016.
Burgay, M. *et al.* (2003). *Nature*, **426**, 531.
Burke, W. L. (1971). *J. Math. Phys.* **12**, 401.
Caves, C. M. (1980). *Phys. Rev. Lett.* **45**, 75.
Caves, C. M. (1981). *Phys. Rev. D* **23**, 1693.
Caves, C. M., K. S. Thorne, R. W. P. Drever, V. D. Sandberg, and M. Zimmermann (1980). *Rev. Mod. Phys.* **52**, 341.
Cerdonio, M. *et al.* [AURIGA] (1997). *Class. Quant. Grav.* **14**, 1491.

Cerdonio, M., L. Conti, J. A. Lobo, A. Ortolan and J. P. Zendri (2001). *Phys. Rev. Lett.* **87**, 031101.
Cerdonio, M. (2003). *Class. Quant. Grav.* **20**, S23.
Chandrasekhar, S. (1969). *Ellipsoidal Figures of Equilibrium.* Yale University Press, New Haven.
Chandrasekhar, S. and F. P. Esposito (1970). *Astrophys. J.* **160**, 153.
Christensen, N. (1992). *Phys. Rev. D* **46**, 5250.
Christodoulou, D. (1991). *Phys. Rev. Lett.* **67**, 1486.
Christodoulou, D. and S. Klainerman (1993). *The global nonlinear stability of the Minkowski space.* Princeton University Press, Princeton.
Clark, J.P.A. and D. M. Eardley (1977). *Astrophys. J.* **215**, 315.
Coccia, E. (1997). In *Proceeding of the 14th International Conference on General Relativity and Gravitation*, M. Francaviglia ed., World Scientific, Singapore.
Coccia, E., J. A. Lobo, and J. A. Ortega (1995). *Phys. Rev. D* **52**, 3735.
Coccia, E. and V. Fafone (1996). *Phys. Lett. A* **213**, 16.
Coccia, E., V. Fafone, G. Frossati, J. A. Lobo and J. A. Ortega (1998). *Phys. Rev. D* **57**, 2051.
Coccia, E., F. Dubath and M. Maggiore (2004). *Phys. Rev. D* **70**, 084010.
Corbitt, T. and N. Mavalvala (2004). *J. Opt. B* **6**, S675.
Cousins, R. D. (1995). *Am. J. Phys.* **63**, 398.
Creminelli, P., A. Nicolis, M. Papucci and E. Trincherini (2005). *JHEP* **0509**, 003.
Cutler, C. *et al.* (1993). *Phys. Rev. Lett.* **70**, 2984.
Cutler, C. and E. E. Flanagan (1994). *Phys. Rev. D* **49**, 2658.
Cutler, C. and D. I. Jones (2001). *Phys. Rev. D* **63**, 024002.
van Dam, H. and M. Veltman (1970). *Nucl. Phys. B* **22**, 397.
Damour, T. (1983a). *Phys. Rev. Lett.* **51**, 1019.
Damour, T. (1983b). In *Gravitational Radiation*, N. Deruelle and T. Piran eds., Les Houches 1982, North-Holland, Amsterdam.
Damour, T. (1986). In *Proceedings of the 4th Marcel Grossmann Meeting on General Relativity* ed R. Ruffini, North-Holland, Amsterdam.
Damour, T. (1987). In *300 Years of Gravitation*, S. Hawking and W. Israel eds., Cambridge University Press, Cambridge.
Damour, T. and N. Deruelle (1981). *Phys. Lett. A* **87**, 81.
Damour, T. and N. Deruelle (1985). *Ann. Inst. H. Poincaré* **43**, 107.
Damour, T. and N. Deruelle (1986). *Ann. Inst. H. Poincaré* **44**, 263.
Damour, T. and G. Schäfer (1988). *Nuovo Cimento B*, **101**, 127.
Damour, T. and B. R. Iyer (1991a). *Phys. Rev. D* **43**, 3259.
Damour, T. and B. R. Iyer (1991b). *Ann. Inst. H. Poincaré* **54**, 115.
Damour, T. and J. H. Taylor (1991). *Astrophys. J.* **366**, 501.
Damour, T. and J. H. Taylor (1992). *Phys. Rev. D* **45**, 1840.
Damour, T., P. Jaranowski and G. Schäfer (2000). *Phys. Rev. D* **62**, 021501. [Erratum-ibid. *D* **63**, (2001) 029903].
Damour, T., P. Jaranowski and G. Schäfer (2001a). *Phys. Rev. D* **63**, 044021. [Erratum-ibid. *D* **66**, (2002) 029901].
Damour, T., P. Jaranowski and G. Schäfer (2001b). *Phys. Lett.* **513**, 147.
Damour, T., B. R. Iyer and B. S. Sathyaprakash (2001). *Phys. Rev. D* **63**, 044023. [Erratum-ibid. *D* **72** (2005) 029902].
Damour, T., I. I. Kogan and A. Papazoglou (2003). *Phys. Rev. D* **67**, 064009.
Damour, T., A. Gopakumar and B. R. Iyer (2004). *Phys. Rev. D* **70**, 064028.
Danzmann, K. and A. Rüdiger (2003). *Class. Quant. Grav.* **20**, S1.
Davies, M. R., R. Ruffini, W. H. Press and R.H. Price (1971). *Phys. Rev. Lett.* **27**, 1466.
Davies, M. R., R. Ruffini and J. Tiomno (1972). *Phys. Rev. D* **5**, 2932.
Deffayet, C., G. R. Dvali, G. Gabadadze and A. I. Vainshtein (2002). *Phys. Rev. D* **65**, 044026.
Detweiler, S. L. and E. Szedenits (1979). *Astrophys. J.* **231**, 211.
Deser, S. (1970). *Gen. Relativ. Gravit.* **1**, 9.
DeWitt, B. S. (1967). *Phys. Rev.* **162**, 1239.
Drever, R. W. P. (1991). In *The Detection of Gravitational Waves*, D. G. Blair ed., Cambridge University Press, Cambridge.
Dubath, F., S. Foffa, M. A. Gasparini, M. Maggiore and R. Sturani (2005). *Phys. Rev. D* **71**, 124003.
Dubovski, S.L., P. G. Tinyakov and I. I. Tkachev (2005). *Phys. Rev. Lett.* **94**, 181102.
Edelstein, W. A., J. Hough, J. R. Pugh and W. Martin (1978). *J. Phys. E* **11**, 710.
Ehlers, J., A. Rosenblum, J. N. Goldberg and P. Havas (1976). *Astrophys. J.* **208**, L77.
Einstein, A., L. Infeld and B. Hoffmann (1938). *Ann. Math.* **39**, 65.
Epstein, R. (1977). *Astrophys. J.* **216**, 92.
Epstein, R. (1979). *Astrophys. J.* **231**, 644.
Epstein, R. and R. V. Wagoner (1975). *Astrophys. J.* **197**, 717.
Faye, G., L. Blanchet and A. Buonanno (2006). *Phys. Rev. D* **74**, 104033.
Feldman G. J. and R. D. Cousins (1998). *Phys. Rev. D* **57**, 3873.
Feynman, R. P., F. B. Morinigo, and W. G. Wagner (1995). *Feynman Lectures on Gravitation*, Addison-Wesley, Reading, MA.
Finn, S. L. (1992). *Phys. Rev. D* **46**, 5236.
Finn, S. L. and D. F. Chernoff (1993). *Phys. Rev. D* **47**, 2198.
Finn, S. L. and A. Lazzarini (2001). *Phys. Rev. D* **64**, 082002.
Finn, S. L. and P. J. Sutton (2002). *Phys. Rev. D* **65**, 044022.
Flaminio, R. *et al.* (2005). Internal VIRGO note VIR-NOT-DIR-1390-304, unpublished.
Flanagan, E. E. (1993). *Phys. Rev. D* **48**, 2389.
Flanagan, E. E. and S. A. Hughes (1998a). *Phys. Rev. D* **57**, 4535.
Flanagan, E. E. and S. A. Hughes (1998b). *Phys. Rev. D* **57**, 4566.
Forward, R. (1971). *Gen. Relativ. Gravit.* **2**, 149.
Giazotto, A. (1989). *Phys. Rept.* **182**, 365.
Gottardi, L. (2004). *Transducers and low-noise two-stage SQUID amplifiers for the spherical gravitational wave antenna MiniGrail.* PhD

thesis, Leiden University, Leiden, The Netherlands.
Gibbons, G. W. and S. W. Hawking (1971). *Phys. Rev. D* **4**, 219.
Giffard, R. P. (1976). *Phys. Rev. D* **14**, 2478.
Goldhaber, A. S. and Nieto, M. M. (1974). *Phys. Rev. D* **9**, 1119.
Goldberger, W. D. and I. Z. Rothstein (2006). *Phys. Rev. D* **73**, 104029.
Gopakumar, A., B. R. Iyer and S. Iyer (1997). *Phys. Rev. D* **55**, 6030.
Gopakumar, A. and B. R. Iyer (2002). *Phys. Rev. D* **65**, 084011.
Gradshteyn I. S. and Ryzhik, I. M. (1980). *Table of Integrals, Series and Products*. Academic Press, London.
Grisaru, M. T., P. van Nieuwenhuizen, and C. C. Wu (1975). *Phys. Rev. D* **12**, 397.
Gupta S. N. (1954). *Phys. Rev.* **96**, 1683.
Gürsel, Y. and M. Tinto (1989). *Phys. Rev. D* **40**, 3884.
Hamermesh, M. (1962). *Group Theory*. Addison-Wesley, Redwood.
Hartle, J. B. (2003). *Gravity. An Introduction to Einstein's General Relativity*, Addison Wesley, San Francisco.
Haugan, M. P. (1985). *Astrophys. J.* **296**, 1.
Haugan, M. P., S. L. Shapiro, and I. Wasserman (1982). *Astrophys. J.* **257**, 283.
Hulse, R. A. (1994) *Rev. Mod. Phys.* **66**, 699.
Hulse, R. A. and J. H. Taylor (1975). *Astrophys. J.* **195**, L51.
Isaacson, R. A. (1968a). *Phys. Rev.* **166**, 1263.
Isaacson, R. A. (1968b). *Phys. Rev.* **166**, 1272.
Iwasaki, Y. (1970). *Phys. Rev. D* **2**, 2255.
Iyer, B. R. and C. M. Will (1993). *Phys. Rev. Lett.* **70**, 113.
Iyer, B. R. and C. M. Will (1995). *Phys. Rev. D* **52**, 6882.
Itoh, Y. (2004). *Phys. Rev. D* **69**, 064018.
Itoh, Y., Futamase, T. and Asada, H. (2000). *Phys. Rev. D* **62**, 064002.
Itoh, Y., Futamase, T. and Asada, H. (2001). *Phys. Rev. D* **63**, 064038.
Itoh, Y. and Futamase, T. (2003). *Phys. Rev. D* **68**, 121501(R).
Jackson, J. D. (1975). *Classical Electrodynamics*. Wiley, Chichester.
Jackson, J. D. and L. B. Okun (2001). *Rev. Mod. Phys.* **73**, 663.
Jaranowski, P. and G. Schäfer (1998). *Phys. Rev. D* **57**, 7274. [Erratum-ibid. *D* **63** (2001) 029902].
Jaranowski, P. and G. Schäfer (1999). *Phys. Rev. D* **60**, 124003.
Jaranowski, P. and G. Schäfer (2000). *Ann. Phys.* **9**, 378.
Johnson, W. W. and S. M. Merkowitz (1993). *Phys. Rev. Lett.* **70**, 2367.
Johnson, W. W. and S. M. Merkowitz (1997). *Phys. Rev. D* **56**, 7513.
Ju, L., D. G. Blair and C. Zhao (2000). *Rep. Prog. Phys.* **63**, 1317.
Kennefick, D. (1994). *Phys. Rev. D* **50**, 3587.
Kennefick, D. (1997). arXiv:gr-qc/9704002.
Kennefick, D. (2007). *Traveling at the Speed of Thought*. Princeton University Press, Princeton.
Kidder, L. E. (1995). *Phys. Rev. D* **52**, 821.
Kidder, L. E., C. M. Willand and A. G. Wiseman (1993). *Phys. Rev. D* **47**, R4183.
Klimenko, S., I. Yakushin, M. Rakhmanov and G. Mitselmakher (2004).

Class. Quant. Grav. **21**, S1685.
Klimenko, S. and G. Mitselmakher (2004). *Class. Quant. Grav.* **21**, S1819.
Kimble, H. J., Y. Levin, A. B. Matsko, K. S. Thorne and S. P. Vyatchanin (2002). *Phys. Rev. D* **65**, 022002.
Konigsdorffer, C., G. Faye and G. Schäfer (2003). *Phys. Rev. D* **68**, 044004.
Kolb, E. W. and M. S. Turner (1990). *The Early Universe*, Addison Wesley, Reading, MA.
Kraichnan, R. H. (1955). *Phys. Rev.* **98**, 1118; *ibid.* **101**, 482.
Kramer, M. *et al.*, (2005). "Testing GR with the Double pulsar: Recent Results", astro-ph/0503386.
Kramer, M. *et al.*, (2006). "Tests of general relativity from timing the double pulsar" astro-ph/0609417.
Krishnan, B. *et al.* (2004). *Phys. Rev. D* **70**, 082001.
Królak, A., K. D. Kokkotas and G. Schäfer (1995). *Phys. Rev. D* **52**, 2089.
Landau, L. D. and E. M. Lifshitz (1976). *Course of Theoretical Physics*, Vol. I: *Mechanics*. Pergamon Press, Oxford.
Landau, L. D. and E. M. Lifshitz (1979). *Course of Theoretical Physics*, Vol. II: *The Classical Theory of Fields*. Pergamon Press, Oxford.
Landau, L.D. and E. M. Lifshitz (1982). *Course of Theoretical Physics*, Vol. IV (by V.B. Berestetskij, E. M. Lifshitz and L. P. Pitaevskij): *Quantum Electrodynamics*. Pergamon Press, Oxford.
Landau, L. D. and E. M. Lifshitz (1970). *Course of Theoretical Physics*, Vol. VII: *Theory of Elasticity*. Pergamon Press, Oxford.
Larson, S. L. and W. A. Hiscock (2000). *Phys. Rev. D* **61**, 104008.
LISA: Pre-Phase A Report, MPQ 208, Max-Planck-Institute für Quantenoptik, Garching, Germany.
Lobo, J. A. (1995). *Phys. Rev. D* **52**, 591.
Lobo, J. A. (2002). *Class. Quant. Grav.* **19**, 2029.
Lorimer, D. R. (2005). Living Rev. Relativity **8**, 7. Online article http://www.livingreviews.org/lrr-2005-7.
Love, A. E. H. (1944). *A Treatise on the Mathematical Theory of Elasticity*. Dover, New York.
Lyne, A. G. *et al.* (2004). *Science*, **303**, 1153.
Lyne, A. G. and F. Graham-Smith (2005). *Pulsar Astronomy*, 3rd edition, Cambridge University Press, Cambridge.
Lyons, L. (1986). *Statistics for Nuclear and Particle Physicists*, Cambridge University Press, Cambridge.
McDonough, R. N. and A. D. Whalen (1995). *Detection of Signals in Noise*, 2nd edition. Academic Press, San Diego.
Maggiore, M. (2000). *Phys. Rept.* **331**, 283.
Maggiore, M. (2005). *A Modern Introduction to Quantum Field Theory*. Oxford University Press, Oxford.
Maggiore, M. and A. Nicolis, (2000). *Phys. Rev. D* **62**, 024004.
Mauceli, E., *et al.* [ALLEGRO] (1996). *Phys. Rev. D* **54**, 1264.
Meers, B. J. (1988). *Phys. Rev. D* **38**, 2317.

Meers, B. J. (1989). *Phys. Lett. A* **142**, 465.
Merkowitz, S. (1995). *Truncated icosahedral gravitational wave antenna*, PhD Thesis, Lousiana State University, available online at http://sam.phys.lsu.edu.
Merkowitz, S. M. and W. W. Johnson (1995). *Phys. Rev. D* **51**, 2546.
Michelson, P. F. (1987). *Mon. Not. R. Astron. Soc.* **227**, 933.
Michelson, P. F. and R. C. Taber (1981). *J. Appl. Phys.* **52**, 4313.
Michelson, P. F. and R. C. Taber (1984). *Phys. Rev. D* **29**, 2149.
Misner, C. W., K. S. Thorne and J. A. Wheeler (1973). *Gravitation*, Freeman, New York.
Mizuno, J. *et al.* (1993). *Phys. Lett. A* **175**, 273.
Newman, E. T. and R. Penrose (1968). *Proc. Roy. Soc. London A*, **305**, 175.
Ni, W.-T. and M. Zimmermann (1978). *Phys. Rev. D* **17**, 1473.
Niebauer, T.M., R. Schilling, K. Danzmann, A. Rüdiger and W. Winkler (1991). *Phys. Rev. A* **43**, 5022.
van Niewenhuizen, P. (1973). *Phys. Rev. D* **7**, 2300.
Nissanke, S. and L. Blanchet (2005). *Class. Quant. Grav.* **22**, 1007.
Ogievetsky, V. I. and I. V. Polubarinov (1965). *Ann. Phys.* **35**, 167.
Ohanian, H. C. and R. Ruffini (1994). *Gravitation and Spacetime*. Norton, New York.
Owen, B. J. (1996). *Phys. Rev. D* **53**, 6749.
Owen, B. J. and B. S. Sathyaprakash (1999). *Phys. Rev. D* **60**, 022002.
Padmanabhan, T. (2004). arXiv:gr-qc/0409089.
Paik, H. J. (1976). *J. Appl. Phys.* **47**, 1168.
Pallottino, G. V. and G. Pizzella (1981). *Nuovo Cim. C* **4**, 237.
Pallottino, G. V. and G. Pizzella (1984). *Nuovo Cim. C* **7**, 155.
Pallottino, G. V. and G. Pizzella (1991). In *The Detection of Gravitational Waves*, D. G. Blair ed., Cambridge University Press, Cambridge.
Pati, M. E. and C. M. Will (2000). *Phys. Rev. D* **62**, 124015.
Pati, M. E. and C. M. Will (2002). *Phys. Rev. D* **65**, 104008.
Penrose, R. (1963). *Phys. Rev. Lett.* **10**, 66.
Penrose, R. (1965). *Proc. Roy. Soc. London A* **284**, 159.
Peters, P. C. (1964). *Phys. Rev.* **136**, B1224.
Peters, P. C. and J. Mathews (1963). *Phys. Rev.* **131**, 435.
Pirani, F. A. E. (1964). In *Lectures on General Relativity*, A. Trautman *et al.* eds., Prentice-Hall, Englewood Cliffs.
Poisson, E. (1993). *Phys. Rev. D* **47**, 1497.
Poisson, E. (1999). arXiv:gr-qc/9912045.
Poisson, E. and C. M. Will (1995). *Phys. Rev. D* **49**, 848.
Poujade, O. and L. Blanchet (2002). *Phys. Rev. D* **65**, 124020.
Price, J. C. (1987). *Phys. Rev. D* **36**, 3555.
Rendall, A. D. (1992). *Proc. Roy. Soc. London A* **438**, 341.
Richard J.-P. and W. M. Folkner (1991). In *The Detection of Gravitational Waves*, D. G. Blair ed., Cambridge University Press, Cambridge.
Rowan, S. and J. Hough, (2000). *Living Rev. Rel.* **3**, 3. Online article

http://www.livingreviews.org/lrr-2000-3.
Rubakov, V., arXiv:hep-th/0407104.
Sachs, R. K. (1961). *Proc. Roy. Soc. London A* **264**, 309.
Sachs, R. K. (1962). *Proc. Roy. Soc. London A* **270**, 103.
Sasaki, M. (1994). *Prog. Theor. Phys.* **92**, 17.
Saulson, P. R. (1984). *Phys. Rev. D* **30**, 732.
Saulson, P. R. (1994). *Fundamentals of Interferometric Gravitational Wave Detectors*, World Scientific, Singapore.
Schutz, B. F. (1986). *Nature*, **323**, 310.
Schutz, B. F. (1991). In *The Detection of Gravitational Waves*, D. G. Blair ed., Cambridge University Press, Cambridge.
Schutz, B. F. and F. Ricci (2001). In *Gravitational Waves*, I. Ciufolini *et al.* eds, IoP Publishing, Bristol.
Shapiro, S.L. and S.A. Teukolsky (1983). *Black Holes, White Dwarfs and Neutron Stars*, Wiley, New York.
Smarr, L. (1979). In *Sources of Gravitational Radiation*, ed. L. Smarr. Cambridge University Press, Cambridge.
Spallicci, A., G. Frossati and A. Królak (1997) *Class. Quant. Grav.* **14**, 577.
Stairs, I. H. (2003). *Living Rev. Relativity* **6**, 5. Online article http://www.livingreviews.org/lrr-2003-5.
Stairs, I. H., S. E. Thorsett, J. H. Taylor and A. Wolszczan (2002). *Astrophys. J.* **581**, 501.
Stevenson, T. R. (1997). *Phys. Rev. D* **56**, 564.
Straumann, N. (2004). *General Relativity. With Applications to Astrophysics*. Springer, Berlin.
Tagoshi, H. and M. Sasaki (1994). *Prog. Theor. Phys.* **92**, 745.
Tagoshi, H., A. Ohashi and B. J. Owen (2001). *Phys. Rev. D* **63**, 044006.
Tanaga, T., H. Tagoshi and M. Sasaki (1996). *Prog. Theor. Phys.* **96**, 1087.
Taylor, J. H. (1994). *Rev. Mod. Phys.* **66**, 711.
Taylor, J. H., L. A. Fowler and P. M. McCulloch (1979). *Nature* **277**, 437.
Taylor, J. H. and J. M. Weisberg (1982). *Astrophys. J.* **253**, 908.
Taylor, J. H. and J. M. Weisberg (1989). *Astrophys. J.* **345**, 434.
Thorne, K. S. (1980). *Rev. Mod. Phys.* **52**, 299.
Thorne, K. S. (1983). In *Gravitational Radiation*, N. Deruelle and T. Piran eds., Les Houches 1982, North-Holland, Amsterdam.
Thorne, K. S. (1987). In *300 Years of Gravitation*, S. Hawking and W. Israel eds., Cambridge University Press, Cambridge.
Thorne, K. S. (1992). *Phys. Rev. D* **45**, 520.
Thorne, K. S. (1994). *Black Holes and Time Warps: Einstein's Outrageous Legacy*, Norton, New York.
Thorne, K. S and Y. Gürsel (1983). *Mon. Not. R. Astron. Soc.* **205**, 809.
Vainshtein, A. I. (1972). *Phys Lett. B* **39**, 393.
Van Den Broeck, C. (2005). *Class. Quant. Grav.* **22**, 1825.

Veitch P. J. (1991). In *The Detection of Gravitational Waves*, D. G. Blair ed., Cambridge University Press, Cambridge.
Veltman, M. J. G. (1976). *Quantum Theory of Gravitation*, in *Methods in Field Theory*, Les Houches 1975, R. Balian and J. Zinn-Justin eds., North-Holland, Amsterdam.
Viceré, A. (2000). In *Experimental Physics of Gravitational Waves*, Urbino 1999 Summer School, M. Barone *et al.* eds., World Scientific, Singapore.
Viceré, A. (2002). *Phys. Rev. D* **66**, 062002.
Vinet, J.-Y., B. Meers, C. N. Man and A. Brillet (1988). *Phys. Rev. D* **38**, 433.
Vinet, J.-Y., V. Brisson and S. Braccini (1996). *Phys. Rev. D* **54**, 1276.
Vinet, J.-Y. *et al.* (1997). *Phys. Rev. D* **56**, 6085.
de Waard, A. (2003). *MiniGrail. The first spherical gravitational wave antenna.* PhD thesis, Leiden University, Leiden, The Netherlands.
de Waard, A., L. Gottardi, J. van Houwelingen, A. Schumack and G. Frossati (2003). *Class. Quant. Grav.* **20**, S143.
Wagoner, R. V. (1979). *Phys. Rev. D* **19**, 2897.
Wagoner, R. V. and C. M. Will (1976). *Astrophys. J.* **210**, 764.
Wagoner, R. V. and H. J. Paik (1977). In *Experimental Gravitation, Proceedings of the Pavia International Symposium*, Accademia Naz. dei Lincei, Roma.
Wainstein, L. A. and V. D. Zubakov (1965). *Extraction of Signals from Noise*, Dover Publications, New York.
Walker, M. and C. Will (1980a). *Phys. Rev. Lett.* **45**, 1741.
Walker, M. and C. Will (1980b). *Astrophys. J.* **242**, L129.
Watson, (1966). *A Treatise on the Theory of Bessel Functions*, Cambridge University Press, Cambridge.
Weinberg, S. (1972). *Gravitation and Cosmology.* Wiley, New York.
Weisberg, J. M. and J. H. Taylor, (2002). In Proceedings of "Binary Pulsars", Chania, Crete 2002, APS Conference Series, M. Bailes, D. J. Nice and S.E. Thorsett eds., astro-ph/0211217.
Weisberg, J. M. and J. H. Taylor, (2004). In Proceedings of "Aspen Winter Conference on Astrophysics: Binary Radio Pulsars", ASP Conference Series, F. A. Raisio and I. H. Stairs eds., astro-ph/0407149.
Will, C. M. (1984). *Ann. Phys.* **155**, 133.
Will, C. M. (1993). *Theory and Experiment in Gravitational Physics*, Revised edition, Cambridge University Press, Cambridge.
Will, C. M. (1998). *Phys. Rev. D* **57**, 2061.
Will, C. M. (2005). *Phys. Rev. D* **71**, 084027.
Will, C. M. (2006). *Living Rev. Relativity* **9**, 3. Online article http://www.livingreviews.org/lrr-2006-3.
Wiseman, A. G. (1992). *Phys. Rev. D* **46**, 1517.
Wiseman, A. G. (1993). *Phys. Rev. D* **48**, 4757.
Wiseman, A. G. and C. M. Will (1991). *Phys. Rev. D* **44**, R2945.
Wiseman, A. G. and C. M. Will (1996). *Phys. Rev. D* **54**, 4813.
Wolszczan, A. (1991). *Nature*, **350**, 688.

Yao, W.-M. *et al.*[Particle Data Group] (2006). *J. Phys. G* **33**, 1. Online version at http://pdg.lbl.gov/
Zakharov, V. I. (1970). *JETP Lett.* **12**, 312.
Zeldovich, Ya. B. and A. G. Polnarev (1974). *Sov. Astron.* **18**, 17.
Zendri, J.-P., *et al.* [AURIGA] (2002). *Class. Quant. Grav.* **19**, 1925.
Zhou, C. Z. and P. F. Michelson (1995). *Phys. Rev. D* **51**, 2517.
Zimmermann, M. (1980). *Phys. Rev. D* **20**, 351.
Zimmermann, M. and E. Szedenits (1979). *Phys. Rev. D* **21**, 891.

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