Bibliography

M. Abramowitz & I. A. Stegun, editors (1972). *Handbook of Mathematical Functions*. Dover Publications, Inc., New York, ninth edition.

C. M. Bender & S. A. Orszag (1978). *Advanced mathematical methods for scientists and engineers*. International series in pure and applied mathematics. McGraw-Hill Inc., New York.

M. V. Berry (1966). *The Diffraction of Light by Ultrasound*. Academic Press, New York, London.

M. V. Berry & K. E. Mount (1972). Semiclassical approximations in wave mechanics, *Rep. Prog. Phys.* **35**, 315–397.

M. V. Berry & C. Upstill (1980). Catastrophe optics: morphology of caustics and their diffraction patterns. In E. Wolf, editor, *Progress in Optics*, volume XVIII, pages 259–346. North-Holland, Amsterdam.

M. V. Berry (1976). Waves and Thom's theorem, *Adv. Phys.* **25**, 1–26.

M. V. Berry (1981). Singularities in Waves and Rays. In R. Balian & *al.*, editors, *Les Houches, Session XXXV, 1980*, pages 456–543. North Holland, Amsterdam.

M. Born & E. Wolf (1959). *Principles of Optics*. Pergamon Press, Oxford, 6th edition.

N. Fröman & P. O. Fröman (1965). *JWKB approximations: contributions to the theory*. North-Holland, Amsterdam.

I. S. Gradshteyn & I. M. Ryzhik (1980). *Table of Integrals, Series, and Products*. Academic Press Inc., San Diego.

M. C. Gutzwiller (1971). *J. Math. Phys.* **12**, 343.

M. C. Gutzwiller (1990). Chaos in Classical and Quantum Mechanics. volume 1 of *Interdisciplinary Applied Mathematics*. Springer, New York.

Y. A. Kravtsov & Y. I. Orlov (1998). Caustic, Catastrophes and Wave Fields. volume 15 of *Springer Series on Wave Phenomena*. Springer, Berlin, second edition.

R. E. Langer (1937). *Phys. Rev.* **51**, 669–76.

N. T. Maitra & E. J. Heller (1996). Semiclassical perturbation approach to quantum reflection, *Phys. Rev. A* **54**, 4763–4769.

N. T. Maitra & E. J. Heller (1997). Barrier tunneling and reflection in the time and energy domains: the battle of the exponentials, *Phys. Rev. Lett.* **78**, 3035–3038.

A. Messiah (1995). *Mécanique quantique*. Dunod, Paris, nouvelle edition.

R. Moissy & F. Bailly (1992). The diffraction of light by quasiperiodic ultrasound, *J. Phys. I (France)* **2**, 1715–1719.

A. H. Nayfeh (1981). *Introduction to Perturbation Techniques*. Wiley, New York.

J. F. Nye (1999). *Natural focusing and fine structure of light*. Institute of Physics Publishing, Bristol.

E. Schrödinger (1926a). Quantisierung als Eigenwertproblem. I, *Ann. Phys. (IV)* **79**, 361–376.

E. Schrödinger (1926b). Quantisierung als Eigenwertproblem. II, *Ann. Phys. (IV)* **79**, 489–527.

E. Schrödinger (1926c). Über das Verhältnis der Heisenberg–

Born–Jordanschen Quantenmechanik zu der meinen, *Ann. Phys. (IV)* **79**, 734–756.

H. Wallis, J. Dalibard & C. Cohen-Tannoudji (1992). Trapping atoms in a gravitational cavity, *Appl. Phys. B* **54**, 407–419.

C. Zener (1932). Non-adiabatic crossing of energy levels, *Proc. R. Soc. London A* **137**, 696–702.