

Bibliography

- [1] M. Abramowitz and I. Stegun, *Handbook of Mathematical Functions* (Dover, New York, 1964)
- [2] V.I. Arnold, *Geometrical Methods in the Theory of Ordinary Differential Equations* (Springer, New York 1983)
- [3] R. Artuso, E. Aurell and P. Cvitanović, *Nonlinearity* **3**, 325 (1990).
- [4] R. Artuso, E. Aurell and P. Cvitanović, *Nonlinearity* **3**, 361 (1990).
- [5] V. M. Babić and V. S. Buldyrev, *Short Wavelength Diffraction Theory*, Springer Series on Wave Phenomena, Springer-Verlag (1990)
- [6] R. B. Balian and C. Bloch, *Ann. Phys. (New York)* **60**, 81 (1970); *ibid.* **63**, 592 (1971); M.V. Berry, M.V., C.J. Howls, C.J. *Proceedings of the Royal Society of London.* **447**, 1931 (1994)
- [7] M. V. Berry and J. P. Keating, *J. Phys.* **A23**, 4839 (1990)
- [8] M. V. Berry and K. E. Mount, *Rep. Prog. Phys.* **35**, 315 (1972)
- [9] V. A. Buslaev, *Sov. Phys.-Dokl.* **10**, 17-9 (1965)
- [10] F. Christiansen, P. Cvitanović and H.H. Rugh, *J. Phys* **A 23**, L713 (1990).
- [11] F. Christiansen, G. Paladin and H.H. Rugh, *Phys. Rev. Lett.* **65**, 2087 (1990).
- [12] P. Cvitanović, B. Eckhardt, P.E. Rosenqvist, G. Russberg and P. Scherer, “Pinball Scattering”, in G. Casati and B. Chirikov, eds., *Quantum Chaos*, (Cambridge University Press, Cambridge 1994).
- [13] P. Cvitanović and P.E. Rosenqvist, “A new determinant for quantum chaos”, in G.F. Dell’Antonio, S. Fantoni and V.R. Manfredi, eds., *From Classical to Quantum Chaos, Soc. Italiana di Fisica Conf. Proceed.* **41**, 57 (Ed. Compositori, Bologna 1993).
- [14] P. Cvitanović, P.E. Rosenqvist, H.H. Rugh, and G. Vattay, *A Fredholm determinant for semi-classical quantization*, *CHAOS* **3**, 619 (1993).

- [15] P. Cvitanović and G. Vattay, *Entire Fredholm determinants for evaluation of semi-classical and thermodynamical spectra*, *Phys. Rev. Lett.* **71**, 4138 (1993).
- [16] P. Cvitanović and B. Eckhardt, *Symmetry decomposition of chaotic dynamics*, *Nonlinearity* **6**, 277 (1993).
- [17] P. Cvitanović and B. Eckhardt, *J. Phys. A* **24**, L237 (1991).
- [18] P. Cvitanović and B. Eckhardt, *Phys. Rev. Lett.* **63**, 823 (1989).
- [19] P. Cvitanović, *Phys. Rev. Lett.* **61**, 2729 (1988).
- [20] P. Cvitanović, *Physica D* **51**, 138 (1991).
- [21] P. Cvitanović, N.J. Balmforth, G.R. Ierley, E.A. Spiegel and G. Vattay, "Periodic orbit expansions for smooth flow fast dynamos", *Proc. of the "Noise in Astrophysics" workshop*, Gainesville, Florida 1993, to appear.
- [22] P. Cvitanović, ed., *Periodic Orbit Theory - theme issue*, *CHAOS* **2**, 1-158 (1992).
- [23] B. Eckhardt, *Physica D* **33**, 89 (1988)
- [24] B. Eckhardt and G. Russberg, *Phys. Rev.* **E 47**, 1578 (1993).
- [25] H.M. Edwards, *Riemann's Zeta Function* (Academic, New York 1974)
- [26] A. Einstein, *Verhand. Deut. Phys. Ges.*, **19**, 82, (1917)
- [27] R. P. Feynman, *Rev. Mod. Phys.* **20**, 367 (1948), R. P. Feynman and A. R. Hibbs, *Quantum Mechanics and Path Integrals*, McGraw-Hill, New York (1965)
- [28] W. Franz, *Theorie der Beugung Elektromagnetischer Wellen*, Springer Verlag, Berlin (1957); *Z. Naturforschung* **9a**, 705 (1954)
- [29] W. Franz and R. Galle, *Z. Naturforschung* **10a**, 374 (1955)
- [30] D. Fried, *Ann. Scient. Éc. Norm. Sup.* **19**, 491 (1986).
- [31] P. Gaspard and D. Alonso Ramirez, *Phys. Rev. A* **45**, 8383 (1992).
- [32] P. Gaspard and S. A. Rice, *J. Chem. Phys.* **90**, 2225, 2242, 2255 (1989); **91**, E3279 (1989)
- [33] P. Gaspard and D. Alonso, *Phys. Rev.* **A47**, R3468 (1993); D. Alonso and P. Gaspard, *Chaos* **3**, 601 (1993)
- [34] M. D. Greenberg, *Application of Greens Functions in Science and Engineering*, Prentice-Hall, Inc. Englewood Cliffs, New Jersey, (1971)
- [35] M. C. Gutzwiller, *J. Math. Phys.* **12**, 343 (1971); *Chaos in Classical and Quantum Mechanics* (Springer-Verlag, New York, 1990)

- [36] T.C. Halsey, M.H. Jensen, L.P. Kadanoff, I. Procaccia and B.I. Shraiman, *Phys. Rev.* **A107**, 1141 (1986).
- [37] E. J. Heller, *J. Chem. Phys.* **62**, 1544 (1975); **64**, 63 (1976); W. Eastes and R. Marcus, *J. Chem. Phys.* **61**, 4301 (1974); W. H. Miller, *J. Chem. Phys.* **63**, 996 (1975)
- [38] Joseph B. Keller and Herbert B. Keller *Journal of the Optical Society of America* **40**, number 1, p. 48, 1950; Bertram R. Levy and Joseph B. Keller *Communications on Pure and Applied Mathematics* Vol. XII, 159-209, (1959)
- [39] Joseph B. Keller *Journal of the Optical Society of America* **52**, number 2, p. 116, 1962;
- [40] R. G. Littlejohn, *J. Stat. Phys.*, **68** No. 1-2, 7, 1992; Lecture notes (Berkeley 1990)
- [41] V. P. Maslov and M. V. Fjedorjuk, *Semiclassical Approximation in Quantum Mechanics*, Dordrecht-Reidel (1981)
- [42] E. Ott, *Chaos in Dynamical Systems*, Cambridge University Press, 1993
- [43] H. Primack, H. Schanz, U. Smilansky and I. Ussishkin, *The Rôle of Diffraction in the Quantization of Dispersing Billiards*, Preprint August 1995.
- [44] P. E. Rosenqvist, Master thesis, Niels Bohr Institute, Copenhagen 1992
- [45] D. Ruelle, *Statistical Mechanics, Thermodynamic Formalism* (Addison-Wesley, Reading, MA, 1978)
- [46] D. Ruelle, *Inventiones math.* **34**, 231 (1976).
- [47] H. H. Rugh, *Nonlinearity* **5**, 1237 (1992); H. H. Rugh, *Thesis*, Copenhagen University (1992); G. Vattay, *Thesis*, Eötvös University Budapest (1992); P. Cvitanović, P. E. Rosenqvist, G. Vattay and H. H. Rugh, *CHAOS* **3** (4), 619 (1993)
- [48] H.H. Rugh, *Nonlinearity* **5**, 1237 (1992).
- [49] K. T. Hansen, *Symbolic Dynamics in Chaotic Systems*, University of Oslo, (September 1993); *Nonlinearity* **6**, No. 5, 753, 771, (1993)
- [50] L. S. Schulman, *Techniques and Applications of Path Integration*, (Wiley-Interscience Publication, 1981)
- [51] A. Selberg, *J. Indian Math. Soc.* **20**, 47 (1956)
- [52] S. Smale, *Bull. Am. Math. Soc.* **73**, 747 (1967).
- [53] G. Vattay, "An Entire Spectral Determinant for Semiclassical Quantization", *Progress of Theoretical Physics*, Supplement No. 116, p. 251, (1994)

- [54] G. Vattay, A. Wirzba and P.E. Rosenqvist, *Periodic Orbit Theory of Diffraction*, *Phys. Rev. Lett.* **73**, 2304 (1994). G.Vattay, A. Wirzba, P. Rosenqvist, *Inclusion of Diffraction Effects in the Gutzwiller Trace Formula*, in Dynamical Systems and Chaos Vol. 2. p. 463, proceedings of ICDC Tokyo 23-27 May 1994, (World Scientific, Singapore 1995); P. E. Rosenqvist, G. Vattay and A. Wirzba, *Application of the diffraction trace formula to the three disk scattering system*, *J. Stat. Phys.* to appear (1995)
- [55] G. Vattay and P. Rosenqvist, *Periodic Orbit Theory of Quantum Mechanics*, *Phys. Rev. Lett.* acc. to appear (1995); *Differential equations to compute \hbar corrections* (<http://xyz.lanl.gov>) (1994)
- [56] A. Voros, *J. Phys.* **A 21**, 685 (1988).
- [57] A. Voros, *Prog. Theor. Phys. Suppl.* **116**,17 (1994); M. Saraceno and A. Voros, to appear in *Physica D*.
- [58] G. N. Watson, *Proc. R. Soc. London* **A95**, 83 (1918)
- [59] N. Whelan, *Phys. Rev. E.*, **51**, No. 4, 3778, 1995
- [60] A. Wirzba, *Validity of the Semiclassical Periodic Orbit Approximation in the 2-and 3-Disk Problems*, *CHAOS* **2**, (1992), 77-83.
- [61] A. Wirzba, *Test of the Periodic Orbit Approximation in n-Disk Systems*, *Nucl. Phys.* **A560**, (1993), 136-150.
- [62] A. Wirzba *Hyperbolic scattering, periodic orbits and diffraction*, in preparation.
- [63] A. Wirzba, privat communication.
- [64] A. Wirzba, in preparation.
- [65] For more details on these topics, see the “non-papers” of Andreas Wirzba on: <http://crunch.ikp.physik.th-darmstadt.de/wirzba/>
- [66] A. Wirzba and M Henseler, *The missing link between the quantum mechanical and semi-classical determination of scattering resonance poles*, to appear. For preview see <http://crunch.ikp.physik.th-darmstadt.de/wirzba/>
- [67] A. Sommerfeld *Optics*, New York, Academic Press, Inc., (1954)
- [68] W. Pauli, *Physical Review* **54**, 924, 1938