

References

- P.M. Bakshi, K.T. Mahanthappa, Expectation value formalism in quantum field theory. *J. Math. Phys.* **4**, 1 (1963)
- P.A.M. Dirac, The physical interpretation of the quantum dynamics. *Proc. Roy. Soc. Lond. A* **113**(765), 621–641 (1927)
- P.A.M. Dirac, V.A. Fock, B. Podolsky, On quantum electrodynamics. *Phys. Zeits. Sowjetunion* **2**, 468 (1932)
- P.A.M. Dirac, The Lagrangian in quantum mechanics. *Phys. Zeits. Sowjetunion* **3**, 64 (1933)
- R.J. Duffin, On The characteristic matrices of covariant systems. *Phys. Rev.* **54**, 1114 (1938). doi:[10.1103/PhysRev.54.1114](https://doi.org/10.1103/PhysRev.54.1114)
- L. Euler, *Methodus Inveniendi Lineas Curvas Maximi Minive Proprietate Gaudentes* (Bousquet, Lausanne and Geneva, 1744)
- L. Euler, *Investigation of the letter, allegedly written by Leibniz*, translated by Wikisource (1752), http://en.wikisource.org/wiki/Investigation_of_the_letter_of_Leibniz
- R.P. Feynman, The principles of least action in quantum mechanics. Ph.D dissertation, Princeton University, Princeton, NJ. (University Microfilms, Ann Arbor, Publications No. 2948) (1942)
- R.P. Feynman, Space-time approach to quantum electrodynamics. *Phys. Rev.* **76**, 769 (1949)
- R.P. Feynman, A.R. Hibbs, *Quantum Mechanics and Path Integrals* (McGraw-Hill, New York, 1965)
- R.J. Glauber, Coherent and incoherent states of radiation field. *Phys. Rev.* **131**, 2766–2788 (1963)
- W.R. Hamilton, On a general method in dynamics. Part I. *Phil. Trans. Roy. Soc.* **124**, 247–308 (1834)
- W.R. Hamilton, On a general method in dynamics. Part II. *Phil. Trans. Roy. Soc.* **125**, 95–144 (1835)
- W. Heisenberg, W. Pauli, Zur Quantendynamik der Wellenfelder. *Z. Phys.* **56**, 1–61 (1929)
- L.V. Keldysh, Diagram technique for nonequilibrium processes. *Zh. Eksp. Teor. Fiz.* **47**, 1515–1527 (1964) (English translation: *Soviet Physics JETP* 20: 1018–1026 (1965).)
- N. Kemmer, The particle aspect of meson theory. *Proc. Roy. Soc. A* **173**, 91–116 (1939). doi:[10.1098/rspa.1939.0131](https://doi.org/10.1098/rspa.1939.0131)
- J.-L. Lagrange, *Mécanique Analytique*. p. 226 (1788)
- K.T. Mahanthappa, Multiple production of photons in quantum electrodynamics. *Phys. Rev.* **126**, 329 (1962)
- P.C. Martin, J. Schwinger, Theory of many-particle systems. *Phys. Rev.* **115**, 1342 (1959)
- P.L.M. de Maupertuis, Accord de différentes lois de la nature qui avaiant jusqu’ici paru incompatibles”. *Mém. As. Sc. Paris* p. 417 (1744)

- P.L.M. de Maupertuis, Le lois de mouvement et du repos, déduites d'un principe de métaphysique. Mém. Ac. Berlin, p. 267 (1746)
- J. Mehra, K.A. Milton, *Climbing the Mountain: The Scientific Biography of Julian Schwinger* (Oxford University Press, Oxford, 2000)
- K.A. Milton, J. Schwinger, *Electromagnetic Radiation: Variational Methods. Waveguides and Accelerators* (Springer, Berlin, 2006)
- K.A. Milton, In Appreciation Julian Schwinger: From nuclear physics and quantum electrodynamics to source theory and beyond. Phys. Persp. **9**, 70–114 (2007). <http://arxiv.org/abs/physics/0610054>
- E. Noether, Invariante Variationsprobleme. Nachr. König. Gesellsch. Wiss. Göttingen. Math-phys. Klasse, 235–257 (1918)
- G. Petiau, University of Paris thesis. Acad. Roy. de Belg., A. Sci. Mem. Collect. **16**(2), 1 (1936)
- E. Schrödinger, Der stetige Übergang von der Mikro- zur Makromechanik. Naturwissenschaften **14**, 664–666 (1926)
- J. Schwinger, On gauge invariance and vacuum polarization. Phys. Rev. **82**, 664 (1951)
- J. Schwinger, The theory of quantized fields. I. Phys. Rev. **82**, 914 (1951)
- J. Schwinger, Theory of quantized fields. III. Phys. Rev. **91**, 728–740 (1953)
- J. Schwinger, *Differential Equations of Quantum Field Theory*, lectures transcribed by R. Blankenbecler, H. Fried, J. Tiemann, issued by Stanford Research Institute, and transcribed into LaTeX by W. Becker (1956)
- J. Schwinger, The geometry of quantum states. Proc. Natl. Acad. Sci. USA **46**, 257 (1960)
- J. Schwinger, Unitary operator bases. Proc. Natl. Acad. Sci. USA **46**, 570 (1960)
- J. Schwinger, Unitary transformations and the action principle. Proc. Natl. Acad. Sci. USA **46**, 883 (1960)
- J. Schwinger, The special canonical group. Proc. Natl. Acad. Sci. USA **46**, 1401 (1960)
- J. Schwinger, Brownian motion of a quantum oscillator. J. Math. Phys. **2**, 407 (1961)
- J. Schwinger, *Quantum Kinematics and Dynamics* (Benjamin, New York, 1970)
- J. Schwinger, *Particles, Sources, and Fields* (Addison-Wesley, Reading, 1970)
- J. Schwinger, A Report on quantum electrodynamics, in J. Mehra, *The Physicist's Conception of Nature* (Reidel, Dordrecht, 1973)
- J. Schwinger, *Particles, Sources, and Fields*, vol. II (Addison-Wesley, Reading, 1973)
- J. Schwinger, *Particles, Sources, and Fields*, vol. I-III. (Addison-Wesley, Redwood City, 1989)
- J. Schwinger, A path to quantum electrodynamics. Phys. Today (1989) [Reprinted in *Most of the Good Stuff: Memories of Richard Feynman*. (eds. L. M. Brown, J.S. Rigden) (AIP, New York, 1993)]
- J. Schwinger, The Greening of quantum field theory: George and I (1993), <http://arxiv.org/abs/hep-ph/9310283> (Published in J. Schwinger, *The Physicist, the Teacher, and the Man*, ed. Y. J. Ng (World Scientific, Singapore 1996), pp. 13–27)
- J. Schwinger, L.L. DeRaad Jr, K.A. Milton, W.-y. Tsai, *Classical Electrodynamics* (Perseus/Westview, New York, 1998)
- J. Schwinger, *Quantum Mechanics: Symbolism of Atomic Measurements* (Springer, Berlin, 2001)
- A. Sommerfeld, *Mechanics-Lectures on Theoretical Physics*, vol. I (Academic Press, New York, 1964)
- D. Toms, *The Schwinger Action Principle and Effective Action* (Cambridge Monographs on Mathematical Physics, 2007)
- H. Weyl, Eine neue Erweiterung der Relativitätstheorie. Ann. der Phys. **59**, 101–133 (1919)