# Appendix

In this appendix we collect a number of bibliographic references for the interested reader who either wants to learn more about Quantum Electrodynamics or is interested in the imbedding of QED in the more general framework of Quantum Field Theory.

1. Books which contain details on the formulation of QED and the calculation of various processes:

- A. Akhiezer and V.B. Berestetskii: *Quantum Electrodynamics*, Interscience, New York (1965)
- J.M. Jauch and F. Rohrlich: *The Theory of Photons and Electrons*, Springer-Verlag, New York, Heidelberg, Berlin (1976)
- G. Källen: *Quantum Electrodynamics*, Springer-Verlag, Berlin (1972)
- I. Bialynicki-Birula and Z. Bialynicka-Birula: *Quantum Electrodynamics*, Pergamon, Oxford (1975)
- V.B. Berestetskii, E.M. Lifshitz, and L.P. Pitaevskii: *Relativistic Quantum Theory*, Pergamon Press, Oxford (1971)
- P.W. Milonni: *The Quantum Vacuum – An Introduction to Quantum Electrodynamics*, Academic Press, San Diego (1994)

2. Two books covering topics related to QED with strong external fields:

- W. Greiner, B. Müller, J. Rafelski: *Quantum Electrodynamics of Strong Fields*, Springer-Verlag, Berlin (1985)
- V.L. Ginzburg (ed.): *Issues in Intense-Field Quantum Electrodynamics*, Nova Science Publ., Commack, N.Y. (1987)

3. The most recent information on the status of QED experiments contrasted with theory has to be extracted from original research papers and from review articles published in conference proceedings. In addition the following book provides a good overview:

- T. Kinoshita (ed.): *Quantum Electrodynamics*, World Scientific, Singapore (1990)

4. An old but still useful collection of reprints of many of the basic original papers related to QED:

- J. Schwinger (ed.): *Quantum Electrodynamics*, Dover, New York (1958)

5. An account of the history of QED:

- S.S. Schweber: *QED and the Men Who Made It*, Princeton University Press, Princeton (1994)

6. Classical textbooks on Quantum Field Theory, in chronological order:
- N.N. Bogoliubov and D.V. Shirkov: *Introduction to the Theory of Quantized Fields*, Interscience, New York (1959)
- S.S. Schweber: *An Introduction to Relativistic Quantum Field Theory*, Harper & Row, New York (1962)
- J.D. Bjorken and S.D. Drell: *Relativistic Quantum Mechanics*, and *Relativistic Quantum Fields*, Mc.Graw-Hill, New York (1964)
- D. Lurié: *Particles and Fields*, Interscience, New York (1968)
- C. Itzykson, J.-B. Zuber: *Quantum Field Theory*, McGraw-Hill, New York (1980)
- S. Weinberg: *Quantum Theory of Fields I–III*, Cambridge University Press, Cambridge (1995 ff.)

7. Some further references on quantum fields and gauge theories, which emphasize the path integral formulation:
- L.H. Ryder: *Quantum Field Theory*, Cambridge University Press, Cambridge (1985)
- D. Bailin and A. Love: *Introduction to Gauge Field Theory*, Adam Hilger, Bristol, Boston (1986)
- R.J. Rivers: *Path Integral Methods in Quantum Field Theory*, Cambridge University Press, Cambridge (1987)
- S. Pokorski: *Gauge Field Theories*, Cambridge University Press, Cambridge (1987)

# Subject Index