

**Literature for**  
**Advanced Course in Experimental Physics EV-A**  
**(Atomic + Molecular Physics and Quantum Optics)**

**Optics**

- Eugene Hecht: *Optics* (Addison-Wesley, New York, 1997)
- Bahaa E. A. Saleh, Malvin E. Teich: *Fundamentals of Photonics* (John Wiley & Sons, New York, 1991)
- Wolfgang Demtröder: *Experimentalphysik 2, Elektrizität und Optik* (Springer, Heidelberg, 1999)
- John D. Jackson: *Classical Electrodynamics* (John Wiley & Sons, New York, 1999)
- Max Born, Emil Wolf: *Principles of Optics* (Cambridge University Press, Cambridge, 1998)

**Laserphysics**

- Dieter Meschede: *Optik, Licht und Laser* (Teubner, Stuttgart, 1999)
- Amnon Yariv: *Quantum Electronics* (John Wiley & Sons, New York, 1989)
- Anthony E. Siegman: *Lasers* (University Science Books, Mill Valley, 1986)

**Quantum Optics + Atomic Physics**

- Christopher J. Foot: *Atomic Physics* (OxfordUniversity Press, Oxford, 2005)
- Mark Fox: *Quantum Optics* (OxfordUniversity Press, Oxford, 2006)
- Gilbert Grynberg, Alain Aspect: *Introduction to Quantum Optics: From the Semi-classical Approach to Quantized Light* (Cambridge Univ. Press, Cambridge, 2010)
- Christopher C. Gerry, Peter L. Knight: *Introductory Quantum Optics* (Cambridge Univ. Press, Cambridge, 2010)
- Marlan O. Scully, Muhammad S. Zubairy: *Quantum Optics* (Cambridge University Press, Cambridge, 1995)
- Girish S. Agarwal: *Quantum Optics* (Cambridge University Press, Cambridge, 2012)
- D. F. Walls, G. J. Milburn: *Quantum Optics* (Springer, Berlin, 1994)
- Wolfgang P. Schleich: *Quantum Optics in Phase Space* (Wiley-VCH, Berlin, 2001)
- C. Cohen-Tannoudji, J. Dupont-Roc, G. Grynberg: *Atom-Photon Interactions* (Wiley/VCH, Weinheim, 2010)
- Wolfgang Demtröder: *Laserspektroskopie: Grundlagen und Techniken* (Springer, Heidelberg, 1998)
- Rodney Loudon, *The Quantum Theory of Light* (Oxford University Press, 2000)
- Leonard Mandel, Emil Wolf: *Optical Coherence and Quantum Optics* (Cambridge University Press, 1995)
- Hans-Albert Bachor: *A Guide to Experiments in Quantum Optics* (Wiley/VCH, Weinheim, 1998)

Harry Paul: *Photonen. Eine Einführung in die Quantenoptik* (Teubner, Stuttgart, 1999)

Thomas Walther, Herbert Walther: *Was ist Licht* (C. H. Beck, München, 1999)