

Suggested research papers

Chapter 1

A. Tonomura et al., "Demonstration of single-electron buildup of an interference pattern," *Am. J. Phys.* **57**, pp. 117-120

R. Gahler and A. Zeilinger, "Wave-optical experiments with very cold neutrons," *Am. J. Phys.* **59**, pp. 316-324

O. Carnal and J. Mlynek, "Young's double-slit experiment with atoms: A simple atom interferometer," *Physical Review Letters* **66**, pp. 2689-2692

G. Mattelucci and C. Beeli, "An experiment on wave-particle duality including a Planck constant measurement," *Am. J. Phys.* **66**, pp. 1055-1059

G. Mattelucci and G. Pozzi, "Two further experiments on electron interference," *Am. J. Phys.* **46**, pp. 619-623

Chapter 2

R. Hanbury Brown and R. Q. Twiss, "Correlation between photons in two coherent beams of light," *Nature* **77**, pp. 27-29

T. Helmuth et al, "Delayed-choice experiments in quantum interference," *Physical Review A* **35**, pp. 2532-2541

Chapter 3

R. I. Pflugor and I. Mandel, "Interference of independent photon beams," *Physical Review* **159**, pp. 1084-1088

P. A. DeYoung et al. "Experimental verification of the Heisenberg principle – An advanced undergraduate laboratory," *Am. J. Phys.* **61**, pp. 560-563

Chapter 4

M. B. Schneider and I. A. LaPuma, "A simple experiment for discussion of quantum interference and which-way measurement," *Am. J. Phys.* **70**, pp. 266-271

M. O. Scully, et al., "Quantum optical tests of complementarity," *Nature* **351**, pp. 111-116

T. Helmuth et al., "Delayed-choice experiment in quantum interference," *Physical Review A* **35**, pp. 2532-2541

Chapters 5 and 6

D. Dehlinger and M. W. Mitchell, "Entangled photons, nonlocality, and Bell's inequalities in the undergraduate laboratory," *Am. J. Phys.* **70**, pp. 903-910

Alain Aspect et al., "Experimental tests of realistic local theories via Bell's theorem," *Physical Review Letters* **47**, pp. 460-463

Alain Aspect et al., "Experimental realization of EPRB *gedankenexperiment*: A new violation of Bell's inequalities," *Physical Review Letters* **49**, pp. 91-94

Alain Aspect et al., "Experimental tests of Bell's inequalities using time-varying analyzers," *Physical Review Letters* **49**, pp. 1804-1807

Chapter 7

C. J. Myatt et al., "Decoherence of quantum superpositions through coupling to engineered reservoirs," *Nature* **403**, pp. 269-273

Chapter 8

W. M. Itano et al., "Quantum Zeno Effect," *Physical Review A* **41**, pp. 2295-2300

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