

Anne J. Cox

Education

University of Virginia, Charlottesville, VA
Ph.D. Physics, January 1994

Rhodes College, Memphis, TN
B.S. Physics, *magna cum laude*, Phi Beta Kappa, May 1989

Professional Experience

Full Professor, Physics, Eckerd College, September 2006-present.

Associate Professor, Physics, Eckerd College, September 2002-August 2006.

Assistant Professor, Physics, Eckerd College, September 1995-August 2002.

Visiting Assistant Professor, Electrical & Computer Engineering, Florida International University, January 1994-May 1995.

Awards

- Distinguished Service Citation, AAPT, July 23, 2008.
- Distinguished Service Award, FL-AAPT Section, April 8, 2006.
- Robert A. Staub Distinguished Teacher Award, Eckerd College, May 2004.

Member: American Association of Physics Teachers, American Physical Society.

Publications

- “Innovative Uses of Video Analysis,” Doug Brown and Anne J Cox, *The Physics Teacher*, 47 (2009) 145-150.
- “Teaching Qualitative Energy-eigenfunction Shape with Physlets,” Mario Belloni, Wolfgang Christian, and Anne J Cox, *The Physics Teacher*, **45** (2007) 488-491.
- “Strategies for Adopting Interactive Engagement Methods,” Mario Belloni and Anne J. Cox, invited contributed to “For the New Teacher” column, *The Physics Teacher*, **45** (2007) 395-6.
- *Physlet[®] Quantum Physics: An Interactive Introduction*, M. Belloni, W. Christian and A. J. Cox (Upper Saddle River, NJ: Prentice Hall, 2006). *Instructor’s Manual: Physlet Quantum Physics*, M. Belloni and A.J. Cox (TIP on-line, Prentice Hall, 2006).
- *Physlet Physics: Interactive Illustrations, Explorations and Problems for Introductory Physics*, W. Christian and M. Belloni, Contributing authors: A.J. Cox, M. Dancy, A. Titus with exploration worksheets by T. Colbert (Upper Saddle River, NJ: Prentice Hall, 2004). *Instructor’s Guide: Physlet Physics*, A.J. Cox and M. Dancy (TIP on-line, Prentice Hall, 2004).

+6 additional peer-reviewed publications on simulations and curricular materials

+ 11 peer reviewed publications in Atomic and Molecular Physics.

Invited Presentations

- “Computation in the Classroom: Open Source Physics Resources” March 16, 2009, American Physical Society (APS) March Meeting, Pittsburg, PA.

- “Bringing Computation into the Classroom,” July 21, 2008. AAPT Summer Meeting, Edmonton, Canada.
- “Pulling it Together: Computation, Curriculum and Collections,” June 11, 2008, Gordon Research Conference, Rhode Island.
- “Computation in Classical Mechanics with Easy Java Simulations,” January 7, 2007, AAPT Winter Meeting, Seattle, WA.

+17 Contributed talks and posters at national and regional meetings.

Workshops

- 15 Workshops at National AAPT meetings on computer resources and pedagogy for teaching physics at the undergraduate and high school level: Physlets, Easy Java Simulations, Simulation Database, and/or Using In-Class Polling.
- 11 Workshops for high school or two-year college instructors at the invitation of other organizations (APS Teacher’s Day, Physics Teacher Resource Agent, ATE/NSF funding)

+Several regional workshops.

Grants

- Co-PI, NSF CCLI Grant Award: DUE 00442581. OPTIC: Open Physics Technology for Interactive Curricula” to develop curricular material and computer software to support upper-level physics courses. Total Budget: \$450,000 for four years (July 2005 – June 2009).
- Consultant, NSF CCLI Grant: “Open-Source Physics Education” under Davidson College for a project combining curriculum development with computational physics and physics education research. Total Budget: \$490,313 (June 2002-June 2005).
- CPU Project. (Constructing Physics Understanding in a Computer-Supported Learning Environment). San Diego State University and National Science Foundation. Joint application with Lakewood High School Center for Advanced Technologies. \$15,000 for three years (1998-2000) to provide physics workshops to secondary school teachers.

+ 2 additional smaller grants

Professional Activities

- NSF- ADVANCE Program, Invited to participate in “Collaborative Research for Horizontal Mentoring Alliances,” PI: Kerry Karukstis, Harvey Mudd College. Part of an alliance of five female full professors in physics at liberal arts institutions. 2007-09.
- Co-editor, Open Source Physics and Statistical and Thermal Physics Collections on ComPADRE, physics resource digital library (www.compadre.org/osp and www.compadre.org/stp).
- Member, AAPT: Committee on Education and Technology (2004-07), Committee for Women in Physics (2009-2012).
- President, Florida Section of AAPT, 2004-2006.
- Hosted Florida AAPT Section meetings and organized several summer workshops (in-service high-school and middle school teachers as well as college physics faculty).