MATTHEW C. SULLIVAN

Ithaca College
Department of Physics
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EDUCATION

1998-2004 **University of Maryland**, College Park, MD
Ph.D. in Physics, 2004
M.S. in Physics, 2000
Dissertation: The Normal-Superconducting Phase Transition of YBCO in Zero Magnetic Field (C. J. Lobb, advisor)

1992-1996 **Stanford University**, Stanford, CA
A.B. in German Studies, 1996
B.S. in Physics, 1996

1990-1992 **Phillips Academy**, Andover, MA
Cum Laude graduate 1992

TEACHING AND RESEARCH EXPERIENCE

2011-present ***Associate Professor***. Ithaca College, Ithaca, NY.
2005-2011 ***Assistant Professor***. Ithaca College, Ithaca, NY.
Courses taught include:

Introduction to Physics I (mechanics; algebra-based), Lab instructor
Introduction to Physics II (E&M; algebra-based), Lecture, lab, and SCALE-UP instructor
Principles of Physics I (mechanics; calculus-based), SCALE-UP instructor
Principles of Physics III (waves, optics, & thermo; calculus-based)
Honors Seminar: Relativity and Quantum Physics in Modern Society
Analytical Mechanics
Solid State Physics
Intermediate Physics Laboratory
Advanced Physics Laboratory
Senior Thesis I and II
Independent Research – Introductory, Intermediate and Advanced

Research in experimental low-temperature physics, with an emphasis on the properties of the cuprate superconductors.
Supervised Senior Thesis projects:

Charles Strehlow ('09): "Measuring the Magnetic Flux Quantum via YBCO Superconducting Quantum Interference Devices," currently attending the University of Iowa seeking a Ph.D. in Physics
Arnold Kotlyarevsky ('10): "Growth of $YBa_2Cu_3O_{7-\delta}$ with Enhanced Flux-Pinning Properties."
Sarah Burleson ('11): "Measurement of the Critical Exponents in a Critically Opalescent Binary Fluid."

2006-present ***Visiting Assistant Professor.*** Center for Nanophysics and Advanced Materials, Department of Physics, University of Maryland, College Park, MD.

2004-2005 ***Process Engineer.*** Intel Corporation, Hillsboro, OR.
Control and optimization of thin-film Si/Ge/B layer growth.

2002-2004 ***Research Mentor.*** Center for Superconductivity Research, University of Maryland, College Park, MD. Trained three graduate students and mentored two undergraduate students, working with Monica Lilly on her senior thesis:

Richard Ott ('03): Jerry B. Marion Award recipient, currently attending the Massachusetts Institute of Technology on a President's Fellowship seeking a Ph.D. in Physics

Monica Lilly ('05): Departmental High Honors, Recipient of Best Honors Thesis & Defense and the IPST Monroe Martin Award. M.S. in Physics ('07) from the University of California at Riverside.

2001-2004, 1998-2000 ***Graduate Research Assistant.*** Center for Superconductivity Research, University of Maryland, College Park, MD.
Research in experimental condensed-matter physics including growth, characterization, and optimization of the cuprate superconductors and other materials.

2000-2001 ***Physics Teacher.*** Phillips Academy, Andover, MA.
Taught two sections of college physics with a strong emphasis on laboratory skills.

1998-1999 ***Teaching Assistant.*** Physics Department, University of Maryland, College Park, MD. Led discussions and labs, graded and wrote tests, quizzes. Courses taught:

Principles of Physics II (E&M, algebra-based)
General Physics I (mechanics, calculus-based)

1996-1998 ***Peace Corps Volunteer (English teacher).*** Baraboi village, Republic of Moldova.
Taught English as a second language to grades 7-11, as well as to adults. Developed and led summer English camp.

1995-1996 ***Undergraduate Research Assistant.*** Gravity Probe B Magnetometry Labs, Stanford University, Stanford CA
Studied the properties of thin-film superconductors using a dc SQUID.

PEER-REVIEWED ARTICLES (undergraduate researchers in bold)

1. Thomas J. Pfaff, **Maksim Sipos*, M.C. Sullivan*,** Max Tran, B.G. Thompson**,** "The Use of Statistics in Experimental Physics," submitted to Mathematics Magazine in August 2010.
2. ***M.C. Sullivan*, R.A. Isaacs, M.F. Salvaggio, J. Sousa, C.G. Stathis, J.B. Olson**, "Scaling analysis of the static and dynamic critical exponents in underdoped, overdoped, and optimally doped $Pr_{2-x}Ce_xCuO_{4-y}$ films," Phys. Rev. B **81**, 134502-1 to 134502-6 (2010).

3. Hua Xu, Su Li, Steven M. Anlage, C. J. Lobb, ***M. C. Sullivan***, Kouji Segawa, Yoichi Ando, "Universal critical behavior in single crystals and films of $YBa_2Cu_3O_{7-\delta}$," Phys. Rev. B **80**, 104518-1 to 104518-11 (2009).
4. **C. P. Strehlow, *M. C. Sullivan***, "A Classroom Demonstration of Levitation and Suspension of a Superconductor over a Magnetic Track", American Journal of Physics **77**, 847-851 (2009), also published in the Virtual Journal of Applications of Superconductivity, August 15, 2009.
5. ***M. C. Sullivan***, B. G. Thompson, **A. Williamson**, "An experiment in the dynamics of thermal diffusion", American Journal of Physics **76**, 637-642 (2008).
6. ***M. C. Sullivan***, D. R. Strachan, Su Li, Hua Xu, K. Segawa, Yoichi Ando, Steven M. Anlage, C. J. Lobb, "Why can't experimentalists agree on the superconducting critical exponents?", Physica C **468** 284-287 (2008).
7. D. R. Strachan, ***M. C. Sullivan***, and C. J. Lobb, "Scaling of cross-over currents in current-voltage characteristics of $YBa_2Cu_3O_{7-\delta}$ films", Phys. Rev. B **73**, 012512 (2006).
8. ***M. C. Sullivan***, D. R. Strachan, T. Frederiksen, **R. A. Ott**, and C. J. Lobb, "Effects of self-field and low magnetic fields on the normal-superconducting phase transition", Phys. Rev. B **72**, 092507 (2005) .
9. S.C.Lee, ***M. C. Sullivan***, **G. R. Ruchti**, S. M. Anlage, B. S. Palmer, B. Maiorov, E. Osquiguil, "Doping-dependent nonlinear Meissner effect and spontaneous currents in high-Tc superconductors", Phys. Rev. B **70**, 014507 (2005).
10. R.K. Rakshit, R.C. Budhani, V.N. Kulkarni, ***M. C. Sullivan***, R.L. Greene, "Influence of buffer layers on superconductivity in $La_{1.85}Sr_{0.15}CuO_4$ epitaxial films", Physica C **415** 74 (2004).
11. ***M. C. Sullivan***, T. Frederiksen, J. M. Repaci, D. R. Strachan, **R. A. Ott**, and C. J. Lobb, "Normal-superconducting phase transition mimicked by current noise", Phys. Rev. B **70** (Rapid Communications), 140503(R) (2004).
12. ***M. C. Sullivan***, D. R. Strachan, T. Frederiksen, **R. A. Ott, M. Lilly**, and C. J. Lobb, "The superconducting phase transition obscured by finite-size effects in thick $YBa_2Cu_3O_{7-\delta}$ films", Phys. Rev. B **69**, 214524 (2004).
13. D. R. Strachan, ***M. C. Sullivan***, T. Frederiksen, **R. A. Ott**, and C. J. Lobb, "What a superconducting transition should look like: extrapolating data from scaling plots", Physica C **408-10**, 562 (2004).
14. D. R. Strachan, ***M. C. Sullivan***, and C. J. Lobb, "Probing the Limits of Superconductivity", Proc. SPIE Vol. 4811, Superconductivity and Related Oxides: Physics and Nanoengineering V, Ivan Bozovic and Davor Pavuna, Eds., pp. 65-77, (2002).
15. R. C. Budhani, ***M. C. Sullivan***, C. J. Lobb, and R. L. Greene, "Anomalous magnetothermopower in the mixed state of the electron-doped high-T_c superconductors", Phys. Rev. B **66**, 052506 (2002).
16. R. C. Budhani, ***M. C. Sullivan***, C. J. Lobb, and R. L. Greene, "Thermopower and Hall conductivity in the magnetic-field-driven normal state of $Pr_{2-x}Ce_xCuO_{4-\delta}$ superconductors", Phys. Rev. B **65** (Rapid Communications), 100517(R) (2002).
17. D. R. Strachan, ***M. C. Sullivan***, P. Fournier, S. P. Pai, T. Venkatesan, and C. J. Lobb, "Do superconductors have zero resistance in a magnetic field?", Phys. Rev. Lett. **87**, 067007 (2001).
18. ***M. C. Sullivan***, J. Mester, J. Lockhart, "Superconducting thin-film absolute field magnetometer", Czech. Jour. Phys. **46 Suppl. 5** 2801 (1996).

FUNDING AND GRANTS

"RUI: Phase Transitions and Fluctuations in the Iron Pnictide Superconductors." Submitted 11/2010 to the National Science Foundation. Requested $260,000. Decision expected 05/2011.

"Photoelectrolysis of Water using a p-n Junction and Hydrogen-Permeable Membrane Composite Thin Films Assembled via Pulsed Laser Deposition." Submitted 11/2010 to the Research Corporation Multi Investigator Cottrell College Science Award, joint project with Akiko Fillinger, Department of Chemistry. Requested $100,000. Decision expected 04/2011.

"Investigation of the phase transition in iron arsenic superconductors." Submitted 02/2010 to Ithaca College Summer Grants for Faculty Research. Awarded $3350 in 04/2010.

"Addition of Experimental Condensed Matter Physics to the Advanced Laboratory Curriculum." Submitted 09/2008 to the School of Humanities and Sciences Educational Grant Initiative. Awarded $1000 in 10/2008.

"Critical dynamics of the electron-doped cuprate superconductor $Pr_{2-x}Ce_xCuO_4$: Completion of research, manuscript submission, and grant renewal proposal." Submitted 10/2008 to the Ithaca College Center for Faculty Research and Development. Awarded $3600 in 12/2008 (release time for Fall 2009).

American Physical Society, Travel Grants for Women Speakers Program. Awarded $390 in 05/2007, $454 in 05/2008, and $500 in 05/2009.

"Measurement of the critical dynamics of the electron-doped cuprate superconductor $Pr_{2-x}Ce_xCuO_4$ as a function of doping." Submitted 10/2007 to the Ithaca College Center for Faculty Research and Development. Awarded $3600 in 12/2007 (release time for Spring 2009).

"Creation of a two-source evaporation system." Submitted 09/2007 to the School of Humanities and Sciences Educational Grant Initiative. Awarded $550 in 10/2007.

"RUI: Critical Dynamics of the Electron-Doped Cuprate Superconductors." Submitted 11/2006 to the National Science Foundation. Awarded $188,820 external with $13,400 internal matching in 06/2007.

"Expanding the Capabilities of the Ithaca College Metal Evaporator." Submitted 09/2006 to the School of Humanities and Sciences Ithaca Fund. Awarded $500 in 10/2006.

"Cryogenic Support for Testing of Low-Temperature Experimental Physics Measurement Systems." Submitted 08/2006 to the Ithaca College Academic Project Grant fund. Awarded $250 in 09/2006.

"Investigation of the Phase Transition in Bulk Crystal YBCO through Zero-Field Electronic Transport." Submitted 02/2006 to Ithaca College Summer Grants for Faculty Research. Awarded $3350 in 04/2006.

"Design and Construction of Low-Temperature Experimental Physics Measurement Systems: Electronic Transport and Specific Heat." Submitted 10/2005 to the Ithaca College Center for Faculty Research and Development. Awarded $3500 in 12/2005 (release time for Fall 2006).

Student grants:
"Physics Senior Thesis: Critical Opalescence in Binary Fluids", submitted to the Humanities and Sciences Education Grant Initiative. Research student Sarah Burleson awarded $560 in 10/2010.

"Growth of Bulk Single Crystal YBCO Superconductors for Ithaca College", Submitted 02/2010 to the Ithaca College Dana Internship Program. Research student Taylor Boyd awarded $5000 in 04/2010 in stipend and scholarship.

"Scaling analysis of the static and dynamic critical exponents in $Pr_{2-x}Ce_xCuO_{4-y}$ films as a function of doping", presentation for the American Physical Society annual March Meeting 2010, submitted to the Sigma Xi Research Society Travel grants. Research student Romaine Isaacs awarded $320 in 10/2009.

"Scaling analysis of the static and dynamic critical exponents in $Pr_{2-x}Ce_xCuO_{4-y}$ films as a function of doping", presentation for the American Physical Society annual March Meeting 2010, submitted to the Humanities and Sciences Education Grant Initiative for Conference Travel. Research student Romaine Isaacs awarded $400 in 10/2009.

"Measuring the static and dynamic critical exponent in the thin-film superconductor $Pr_{2-x}Ce_xCuO_4$", Submitted 02/2009 to the Ithaca College Dana Internship Program. Research student Romaine Isaacs awarded $5000 in 04/2009 in stipend and scholarship.

"Physics Senior Thesis Project: Jospehson Effect in Cuprate Superconductors", submitted to the Humanities and Sciences Education Grant Initiative Contingency Grant Application. Research student Charles Strehlow awarded $1000 in 06/2008.

"Measuring the static critical exponent in the thin-film superconductor $Pr_{2-x}Ce_xCuO_4$", Submitted 02/2008 to the Ithaca College Dana Internship Program. Research student Romaine Isaacs awarded $5000 in 04/2008 in stipend and scholarship.

"Measuring Critical Current Density in Thin-film Cuprate Superconductor $YBa_2Cu_3O_7$" Submitted 02/2008 to the Ithaca College Dana Internship Program. Research student Emily Backus awarded $5000 in 04/2008 in stipend and scholarship.

"Demonstrating Levitation and Suspension of a Superconductor on a Magnetic Track", presentation for the American Physical Society annual March Meeting, submitted to the Sigma Xi Research Society Travel grants. Research student Charles Strehlow awarded $500 in 02/2008.

"Demonstrating Levitation and Suspension of a Superconductor on a Magnetic Track", presentation for the American Physical Society annual March Meeting, submitted to the Humanities and Sciences Education Grant Initiative for Conference Travel. Research student Charles Strehlow awarded $400 in 02/2008.

"Measuring Critical Current Density in Thin-film Cuprate Superconductor $YBa_2Cu_3O_7$" Submitted 02/2007 to the Ithaca College Dana Internship Program. Research student Justin Sousa awarded $5000 in 04/2007 in stipend and scholarship.

"Design, Fabrication, and Characterization of Thin Metallic Films via Evaporation and the Hall Effect." Submitted 02/2006 to the Ithaca College Dana Internship Program. Research student Penyo Michev awarded $5000 in 04/2006 in stipend and scholarship.

INVITED TALKS

Scholarly talks:

"A Century of Superconductivity: History, achievements, and where we go from here," Trinity University, San Antonio TX, November 2010.

"A century of superconductivity," Hartwick College, Oneonta NY, April 2010.

"The superconducting revolution: How (and if!) the high-temperature superconductors superconduct," Allegheny College, Meadville PA, February 2010.

"Are superconductors really superconducting?", Binghamton University Physics Colloquium, Binghamton NY, April 2008.

Public talks:

"What's so super about superconductors?" Allegheny College, Meadville PA, February 2010.

"The SUPER in superconductors," Ithaca College Physics Café, Ithaca NY, February 2010.

CONTRIBUTED TALKS (undergraduate co-authors in bold)

"Doping dependence of the dynamic and static critical exponents in $Pr_{2-x}Ce_xCuO_4$," ***M.C. Sullivan*****, R. Isaacs, J. B. Olson, J. Sousa, M. Salvaggio**, and R. L. Greene, *American Physical Society March Meeting*, Pittsburgh, PA 2009.

"Doping dependence of the dynamic critical exponent in $Pr_{2-x}Ce_xCuO_4$," ***M.C. Sullivan***, J**. Sousa, M. Salvaggio**, and R. L. Greene, *American Physical Society March Meeting*, New Orleans, LA 2008.

"Why can't experimentalists agree on the superconducting critical exponents?", ***M. C. Sullivan***, D. R. Strachan, Su Li, Hua Xu, Steven M. Anlage, and C. J. Lobb, *Fluctuations & Phase Transitions in Superconductors*, Nazareth Ilit, Israel, June 2007.

"Normal-superconducting Phase Transition Obscured by Current Noise," ***M. C. Sullivan*** , S. Li , H. Xu , **M. Lilly** , C. J. Lobb, *American Physical Society March Meeting*, Los Angeles, CA 2005.

"Examination of the Critical Regime in High-Temperature Superconductors," ***M. C. Sullivan***, D. R. Strachan, Steven M. Anlage, C. J. Lobb, *American Physical Society March Meeting*, Indianapolis, IN, 2002.

"Superconducting Thin-Film Absolute Field Magnetometer," ***M. C. Sullivan***, J. Mester, J. Lockhart, *American Physical Society March Meeting*, St. Louis, MO, 1996.

Student talks:

"A study of the critical current density in superconducting thin films", **E.S. Backus**, *James J. Whalen Academic Symposium*, Ithaca College, Ithaca NY, April 2010.

"A study of the critical current density in optimally doped and under-doped thin-films of the cuprate superconductor $YBa_2Cu_3O_{7-\delta}$," **E.S. Backus, *M.C. Sullivan***, *American Physical Society March Meeting*, Portland, OR 2010. Emily Backus received an award (one of five) for the best undergraduate presentation.

"Growth of Superconducting Bulk Single Crystals and their use in Levitation Demonstrations," **A. Kotlyarevsky, *M.C. Sullivan***, J. Hunting, *American Physical Society March Meeting*, Portland, OR 2010.

"Scaling analysis of the static and dynamic critical exponents in $Pr_{2-x}Ce_xCuO_4$ films as a function of doping," **R. Isaacs, *M.C. Sullivan,* M. F. Salvaggio, J. Sousa , C.G. Stathis, J. B. Olson,** *American Physical Society March Meeting*, Portland OR 2010.

"Measurement of the magnetic flux quantum using a SQUID", **Charlie Strehlow**, *James J. Whalen Academic Symposium*, Ithaca College, Ithaca NY, April 2009.

"Growth and Patterning of Superconducting Thin Films", **Justin Sousa**, *James J. Whalen Academic Symposium*, Ithaca College, Ithaca NY, April 2008.

"Demonstrating Levitation and Suspension of a Superconductor on a Magnetic Track," **Charles P. Strehlow, *M.C. Sullivan***, *American Physical Society March Meeting*, New Orleans, LA 2008.

"Repair and Calibration of the Thin-film Metal Evaporator", **George S. DeBeck V**, *James J. Whalen Academic Symposium*, Ithaca College, Ithaca NY, April 2007.

CONTRIBUTED POSTERS

"Intermediate and Advanced Physics Laboratories: Breadth and Depth in Experimental Physics," ***M.C. Sullivan*****,** *American Association of Physics Teachers Topical Conference on Advanced Laboratories*, Ann Arbor, MI 2009.

"Finding thermal conductivity and specific heat via thermal diffusion in rods," ***M.C. Sullivan*****,** B.G. Thompson, *American Association of Physics Teachers Topical Conference on Advanced Laboratories*, Ann Arbor, MI 2009.

"The dynamic critical exponent in optimally doped $Pr_{1.85}Ce_{0.15}CuO_4$ as a function of transition width," **R. Isaacs, J. B. Olson, J. Sousa, M. Salvaggio**, ***M.C. Sullivan*****,** and R. L. Greene, *American Physical Society March Meeting*, Pittsburgh, PA 2009.

"A study of the critical current density in optimally-doped, thin-film cuprate superconductor $YBa_2Cu_3O_{7-\delta}$," **E. S. Backus, M. Lilly**, and ***M.C. Sullivan***, *American Physical Society March Meeting*, Pittsburgh, PA 2009.

"Integration of Lab and Lecture in Large Introductory Courses", ***M. C. Sullivan***, *New Faculty in Physics and Astronomy Workshop Reunion*, College Park MD, June 2007.

RESEARCH STUDENTS

Emily Backus Class of 2013	Critical current in YBCO as a function of temperature. 4 semesters and summers 2008 (Dana intern), 2009, 2010.
Martín Garay Class of 2013	Critical current in YBCO as a function of temperature. 1 semester.
Andrew Hope Class of 2012	Growth of bulk single crystal superconductors. 2 semesters, summer 2010.
Jodi-Ann McLean Class of 2012	Growth of bulk single crystal superconductors. 1 semester.
Sarah Burleson Class of 2011	Measurement of the critical exponents in a binary fluid mixture 2 semesters. Senior Thesis 2011.
Adam Iaizzi Class of 2011	Wiring and thermal testing of a closed-cycle cryocooler. Repair of Hall effect experiment. 4 semesters.
Judith Olson Class of 2011	Critical current in YBCO as a function of temperature. 2 semesters and summer 2008.
Chris Stathis Class of 2011	Insulation of YBCO pucks. Repair of temperature controller. Repair of specific heat experimental apparatus. 3 semesters and summer 2009.
Vince Whitney Class of 2011	Wiring and contact evaporation for thin films. 2 semesters.
Taylor Boyd Class of 2010	Growth of bulk single crystal superconductors. Summer 2010 (Dana intern).
Romaine Isaacs Class of 2010	Measurement of thin-film $Pr_{2-x}Ce_xCuO_4$ in a magnetic field and critical current in YBCO as a function of temperature. Currently attending the University of Maryland seeking a Ph.D. in Materials Science. 4 semesters and summers 2008 (Dana intern), 2009 (Dana intern), 2010.

Arnold Kotlyarevsky Class of 2010	Creation of a two-source metal evaporator, design and construction of a superconducting roller-coaster track. Growth of flux-pinning YBCO pucks. 5 semesters and summers 2008, 2009. Senior Thesis 2010.
Justin Sousa Class of 2009	Growth, patterning, and measurement of thin-film $Pr_{2-x}Ce_xCuO_4$. Currently attending UMass Lowell seeking a Ph.D. in Physics. One semester and summer 2007 (Dana intern).
Charles Strehlow Class of 2009	Design, construction and modeling of levitation and suspension track demonstration. Growth, design, patterning, and testing of bi-crystal SQUIDs (Senior thesis project). Currently attending Iowa State seeking a Ph.D. in Physics. 4 semesters and summers 2007, 2008. Senior Thesis 2009.
Nik Batruch Class of 2008	Re-wiring and maintenance of electrical circuitry. Currently employed by Syracuse Research Corporation in Syracuse, NY. One semester.
George DeBeck V Class of 2008	Design and construction of passive low-pass filters for use in the low-temperature probe. Growth of Au, Cr, NiCr, and Pt films via evaporation. Currently attending Oregon State University seeking a Ph.D. in Physics. 4 semesters.
Penyo Michev Class of 2008	Design, fabrication, and characterization of Al thin films via evaporation and the Hall effect. 2 semesters and summer 2006 (Dana intern).
Brendan Pratt Class of 2008	Machining, roller-coaster track design and filming. Currently attending Boston University. One semester.
Brandon Sforzo Class of 2008	Design and fabrication of low-temperature apparatus. Currently attending Georgia Tech seeking a Ph.D. in Mechanical Engineering. 2 semesters.
Zak Brown Class of 2007	Construction and testing of low-pass filters. Wiring and testing of critical current density in YBCO. Currently employed as an engineer at the Cornell synchrotron. 2 semesters.
Nitin Rajan Class of 2007	Programming and testing of specific heat measurement apparatus. Currently attending Yale University seeking a Ph.D. in Physics. 2 semesters.
Marco Salvaggio Class of 2007	Growth, patterning, and measurement of thin-film $Pr_{2-x}Ce_xCuO_4$. One semester and summer 2007.
Monica Lilly Class of 2005	Thickness and surface roughness characterization with an AFM. Critical current density in YBCO. Critical exponents in PCCO. M.S. in Physics from UC Riverside. Currently employed by Northrup Grumman. 3 semesters and summers 2003, 2004. Senior Thesis 2005. (University of Maryland)
Richard Ott Class of 2003	Thin-film growth and characterization. Received his Ph.D. in Physics from MIT. 4 semesters and summers 2001, 2002. (University of Maryland)

SERVICE

Service to the Department

3-2 Engineering Program Liaison to Cornell University, 2009-present.
Department of Physics seminar coordinator, 2005-2009.
Physics Honor Society (Sigma Pi Sigma) advisor, 2006-present.
Physics Department Five-Year Planning and Assessment Committee member, 2005-present.
Laboratory and Experimental Skill Development Planning and Assessment coordinator, 2007.

Service to the School of Humanities and Sciences

H&S Faculty Senate member, 2009-present.
Humanities and Sciences Curriculum Committee Co-Chair, 2009-present.
Humanities and Sciences Curriculum Committee member, 2006-2009.
Humanities and Sciences Curriculum Committee, General Education Subcommittee Chair, 2009-present.
Humanities and Sciences Curriculum Committee, General Education Subcommittee member, 2006-2009.
Humanities and Sciences Committee on Academic Policies and Procedures, 2006-2008.

Service to Ithaca College

Faculty Council member, 2007-2009.
Center for Faculty Research and Development Released Time review panel, 2009.
Ithaca Today Physics representative, Springs 2006, 2007,2008.
Person to Person participant, 2005-present.
Ithaca College Club Tennis Advisor, 2008-present.

Service to the Community

Community outreach to local schools through Ithaca College's Partnership in Teaching, program entitled "Temperature and Heat."

Service to the Profession

Proposal Reviewer: National Science Foundation
Referee: Physical Review B, American Journal of Physics, Physica C, IEEE transactions on Applied Superconductivity, Magnetism and Magnetic Materials Conference Proceedings, Theatre Design & Technology
National Defense Science and Engineering Graduate Fellowship Program selection panel member, representing Physics, 2006 – 2010.
Participant, Adopt-A-Physicist sponsored by the Society of Physics Students, 2009-2010.
Advanced Placement Course Auditor, 2007.
National Nanotechnology Infrastructure Network REU program evaluator, August 2006.

PROFESSIONAL AFFILIATIONS

American Physical Society
American Association of Physics Teachers
Society of Physics Students
Sigma Pi Sigma

HONORS AND AWARDS

Dean of Humanities and Sciences Merit Award to Physics Department, Spring 2006.
Physics Department Merit Award for Excellence in Teaching, Spring 2006, 2009.