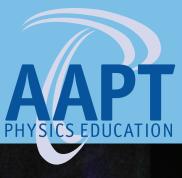
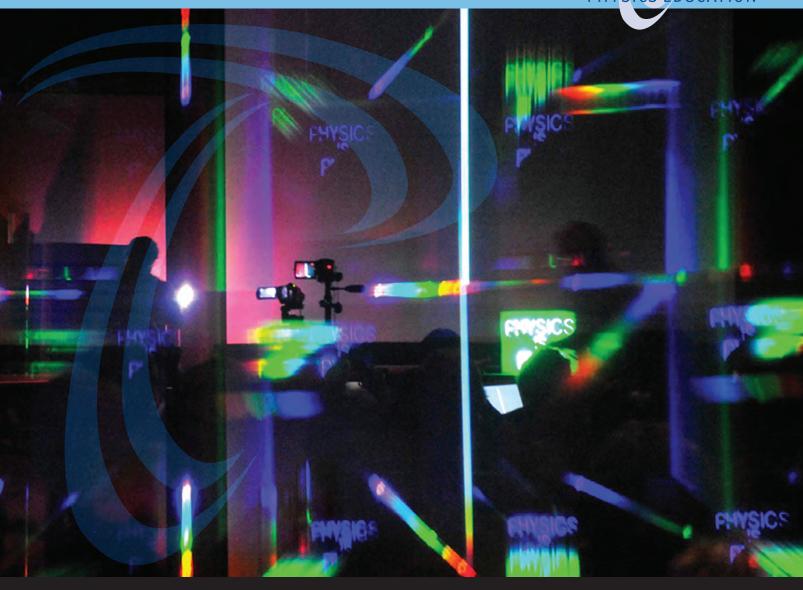
# **American Association of Physics Teachers**





# Executive Board

### President

Lila M. Adair Piedmont College Monroe, GA

### **President-Elect**

Alexander Dickison Seminole Community College Sanford, FL

### **Vice-President**

David M. Cook Lawrence University Appleton, WI

### **Secretary**

Steven Iona University of Denver Denver, CO

### Treasurer

Paul W. Zitzewitz University of Michigan - Dearborn Dearborn, MI

### **Past President**

Harvey Leff California State Polytechnic University Pomona, CA

# **Chair of Section Representatives**

Alan Gibson Connect2Science Rochester Hills, MI

### **Vice Chair of Section**

### Representatives

Mary Mogge California State Polytechnic University Pomona, CA

### **At-Large Board Members**

Gordon Ramsey Loyola University Chicago Frankfurt, IL

Dwain Desbian Estrella Mountain Community College Buckeye, AZ

Elizabeth B. Chesick Baldwin School Haverford, PA

### **Ex-Officio Member Editor**

American Journal of Physics Jan Tobochnik Kalamazoo College Kalamazoo, MI

### **Ex-Officio Member Editor**

*The Physics Teacher*Karl C. Mamola
Appalachian State University
Boone, NC

### Ex-Officio Member Executive Officer

Warren W. Hein

# 2008 in Summary

Presidential Statement	2
Executive Officer Statement	3
Leadership and Service	4
Publications	5
Membership	7
Major Events	8
Programs	9
Collaborative Projects	10
High School Physics Photo Contest	13
Awards and Grants	14
Fundraising	16
Committee Contributions	18
AAPT Sections	20
Financials	22

# **Presidential Statement**



AAPT is a truly unique organization. For over thirty years, it has been my personal inspiration, a place to meet and share with other physics teachers, the source of unlimited lab activities and teaching techniques, a chance to rub shoulders with and learn from Nobel Laureates and recognized leaders in physics and physics education, an opportunity to develop leadership skills, and a voice to the world about the

wonders of physics. No other scientific organization offers the unique personal experiences that we have at AAPT. We are truly a member-driven society designed to provide a service to the membership and the physics community at large. We may be small, but we are mighty.

The year 2008 was an exciting year of change for AAPT. I had the great pleasure of working with three very different Executive Officers; Toufic Hakim, Charlie Holbrow, and Warren Hein, each of whom brought new and creative ideas to AAPT. As the United States listened to speeches by candidates wishing to become our next president, the word we heard the most was CHANGE. Change became our 2008 theme also, because with each new Executive Officer came new ideas and initiatives, changes in programs, staff changes, publications, and communication changes, from less print to more electronic formats, and of course financial changes after the stock market problems. We had to tighten our belt, but business went on as usual, in spite of the financial crunch. Our new CFO and fundraising staff developed new and productive ways to provide opportunities for individuals and foundations to make donations to AAPT and to sponsor AAPT events, while our membership department upgraded the electronic services and looked at new ways to attract more members to AAPT.

But through all of those changes, AAPT maintained the outstanding services for which we are known. The Department Chairs Conference was once again a great success. The New Physics and Astronomy Faculty Workshop, co-sponsored with APS and AAS, expanded to two workshops per year, and plans

began for a Two-Year College New Faculty Workshop. The PTRA program began to wind down in the final stage of the NSF grants that began in 1985, and looked at ways of reconfiguring itself through other successful programs and began offering special workshops for AAPT sections. The International Physics Olympiad team, co-sponsored with AIP, brought home from Vietnam one silver medal and four gold medals with an overall rating of second place, the best ever for the United States. AAPT increased its participation in the National Science Teachers Association meetings with all-day "Physics Day" workshops. We provided judges for the International Science and Engineering Fair, and increased AAPT's visibility at National Teacher Day events across the country. We forged a stronger relationship between AAPT and the National Society of Black Physicists (NSBP) and the National Society of Hispanic Physicists (NSHP), and were able to plan some cross-over events between the joint NSBP-NSHP national meeting and the joint AAPT-APS national meeting to be held in Washington, DC in February of 2010. And of course our two annual meetings in Baltimore and Edmonton were outstanding, with record numbers of participants and events.

Many of our activities are collaborative efforts with our sister societies APS, AAS, AIP, NSTA and others. Working together for a common goal, we are better able to serve the physics community. ComPADRE, the NSF funded program collaboration of AAPT, AAS, APS, AIP and SPS, through the National Science Digital Library is growing, and the PhysTEC program, cosponsored with APS and AIP, saw great success in increasing the number of physics majors training to become physics teachers.

None of this could happen without the help of many people, most of whom are volunteers. I would like to thank the members of the AAPT Executive Board for their support and their willingness to stand firm and to make some very difficult decisions this year; the members of the AAPT Committees, who carry out the mission of APPT; the Section Representatives, who serve as liaisons between AAPT and local sections; the staff at our national office, who keep the Executive Board informed of important issues and provide all of the services for which AAPT has become famous; and each of the 10,000 members. You are what makes AAPT great.

Lila M. adair

# **Executive Officer Statement**



I am pleased to be serving as AAPT's Executive Officer as of September 1. As many of you know, I served AAPT as Associate Executive Officer from February 1997 through August 2007, when I went to NSF as a Program Officer in the Division of Undergraduate Education. My tenure as Associate Executive Officer, under the able leadership of Bernie Khoury, was a rewarding time in my professional life, and I thank him for his mentorship during that period. My past year at

NSF has been a valuable and enjoyable experience for me. By serving as Program Officer, I developed a deeper appreciation for the role NSF and other agencies play in supporting our work in physics education.

This has been a year of change for the Association. As an organization and as physics teachers, we face extraordinary challenges and opportunities. AAPT is a great membership-based organization and we have the talent and vision to use these assets to position our Association as the undisputed leader in physics education.

It is in science education, specifically physics education, that the members of AAPT have the most to contribute to the global future of science and mathematics enterprise. Due to the discipline-specific research being done by the Physics Education Research community, we know what works in terms of engaging students in their learning, which then results in better understanding and retention of the physics content.

AAPT member volunteers also make a difference in the world through work on Area Committees or Board Advisory Committees, by providing leadership and outreach for the organization as section officers, and by providing input, both formal and informal, to the Executive Board and national office. In addition, and maybe more important, hundreds, and maybe even thousands of volunteers have served their colleagues by providing workshops at AAPT national and section meetings, and many other activities too numerous to mention. AAPT's prestigious journals, *The American Journal of Physics*, and *The Physics Teacher*, are known for their superior quality and content thanks to the volunteer efforts of many editorial committees and peer reviewers.

AAPT has a number of other programs and opportunities where physics educators (anyone who teaches physics K-20) can

learn about strategies and techniques to engage their students, improve the way in which their department prepares teachers, increase the number of students who take pre-college physics, and increase the number of students who choose a physics major in college:

- The annual winter and summer meetings which include workshops by leaders in the physics education community.
   The 2008 Winter Meeting in Baltimore and the Summer Meeting in Edmonton were outstanding professional development opportunities and among our best meetings ever.
- The New Physics and Astronomy Faculty Workshop trains new faculty in their first three years of service, about active engagement techniques that can be used to immediately enhance their teaching effectiveness. This is a joint program with APS and AAS, led by AAPT and funded by NSF.
- The NSF-funded ComPADRE Pathway project which provides peer-reviewed online digital resources in physical science, and physics and astronomy resources for physics educators and students. This is a joint program with APS, AAS, and AIP/SPS led by AAPT.
- The Physics Teacher Education Coalition (PhysTEC) project, whose goal is to increase the number and quality of precollege physics teachers, is a joint project led by APS with AAPT and AIP as active participants. Funding is provided by NSF and the APS 21st Century Campaign. A National Task Force on Teacher Preparation is currently investigating the best practices in physics teacher preparation as an ancillary project to PhysTEC.
- AAPT/PTRA is a professional development program for precollege teachers that has been funded almost continuously by NSF since 1985.

This is just a sample of the many projects and opportunities for professional development in which AAPT is leading or plays a leadership role. In these times of economic stress, your membership in AAPT is more important than ever to support and maintain the programs of the association.

As members of AAPT and as physics educators, we share the belief that an understanding of physics will enrich the education and future employment prospects of all students. Member, volunteer, and donor support of the organization's goal of "Enhancing the understanding and appreciation of physics through teaching" makes our programs and publications in support of physics education possible. Thank you for your support.

# Leadership and Service

# Mission

AAPT's mission is to enhance the understanding and appreciation of physics through teaching.

# Values

Embracing the notion that physics understanding is critical to the well-being of society, AAPT is committed to serving its members and the larger community by promoting effectiveness in physics teaching for diverse audiences and in various settings, with the strong belief that successful teaching is based on solid physics content and effective pedagogy; that students of various backgrounds have the capacity to understand physics; and that physics ultimately serves the public good. AAPT highly values collaboration and dialogue among educators of physics at all institutional levels and endeavors to facilitate such interactions.

# Vision

Aspiring to advance the greater good through physics, AAPT strives to be the leading voice, primary resource, advocate of choice, and driving force in physics education, serving professionals who teach physics and support physics teaching at all levels.

# ADVOCACY LEADERSHIP PHYSICS COMMUNITY

# **Publications**

Having a strong publications program enables AAPT members to obtain greater insight into physics and learn about new teaching methods.

### **American Journal of Physics**

The American Journal of Physics (AJP) successfully transitioned to a number of new editors in 2008. Jan Tobochnik returned as Editor on July 1,2008 after taking a one-year leave as Interim Provost at Kalamazoo College. During Tobochnik's absence, John Mallinckrodt served as acting editor. He customized the editorial management software, Editorial Express. Mallinckrodt will continue as a consulting editor for AJP. In the spring of 2008, Hans C. von Baeyer of The College of William and Mary, replaced Dan Schroeder as the Book Review Editor. In 2007, Frank Wolfs of Rochester University took over as the Editor of the Apparatus and Demonstration Notes section, and that section now uses Editorial Express. Karen Cummings stepped down at the end of the summer of 2008 as Editor of the Physics Education Research Section (PERS). Tobochnik will receive new submissions until Charles Henderson of Western Michigan University takes over as PERS Editor on January 1, 2009.

The rate of submission to *AJP* is stable at approximately 800 submissions per year. The acceptance rate is about 25%. In the near future we will be upgrading the online *AJP* website hosted by AIP's *Scitation*®, so that many new online tools will be available to subscribers.

### **Resource Letters**

AJP periodically publishes Resource Letters on topics that are treated in introductory or intermediate physics courses to help college and university physicists, astronomers, and other scientists improve their courses or to serve as bridges for those who are moving into new areas of teaching or research. Three were published in 2008.

### **Research in Physics Education**

AJP also includes research papers that describe findings in the area of physics education research (PER) and are accessible to a broad physics readership. A special section is further devoted to PER papers. In 2008 there were 16 papers published in twelve issues.

### **Apparatus and Demonstration Notes**

In this section, *AJP* publishes brief communications reporting new demonstrations, laboratory equipment, techniques, or materials of interest to teachers of physics. In 2008, *AJP* published six such reports.

### **Book Reviews**

In addition, AJP publishes book reviews regularly, and often in grouped subjects. Eight book reviews appeared in 2008.

### **Editorial Advisory Board**

Christian Brosseau, Université de Bretagne Occidentale Robert P. Geroch, University of Chicago Madeleine Msall, Bowdoin College Gerardo Muñoz, California State University, Fresno Eric Poisson, University of Guelph Beatew Schmittmann, Virginia Polytechnic Institute & State University Bruce R. Thomas, Carleton College Lev Vaidman, Tel Aviv University Andrew Zangwill, Georgia Institute of Technology

### **Editors and Staff**

Editor Jan Tobochnik Kalamazoo College

Associate Editor Harvey Gould Clark University

Consulting Editors David Griffiths Reed College

Barry R. Holstein University of Massachusetts

John Mallinckrodt California State Polytechnic University Pomona

William J. Mullin University of Massachusetts

Apparatus and Demonstrations Notes Editor Frank L. H. Wolfs University of Rochester

Book Review Editor Hans C. von Baeyer College of William and Mary

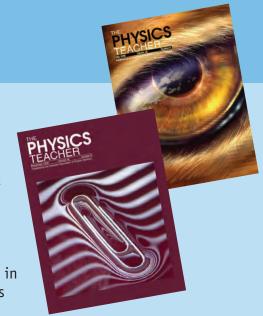
Physics Education Research Section Editor Karen Cummings Southern Connecticut University

Resource Letters Editor Roger H. Stuewer University of Minnesota

# **Publications**

### The Physics Teacher

Now in its eighth year under the editorship of Karl Mamola, *The Physics Teacher (TPT)* is reaching ever greater numbers of readers. Our total subscribers are increasing, as are the number of downloaded articles and online users. With each issue, we strive to continue supporting, inspiring, and challenging our target audience — high school and college teachers of introductory physics — as well as our many other readers. We have recently expanded our efforts to publish more articles dealing with topics in contemporary physics. Several are in various stages of preparation and should begin appearing in our pages during the coming year.



### **Editorial Board**

Greg DiLisi John Carroll University University Heights, OH

Kenneth Ford Philadelphia, PA

James L. Hicks 4701 Edgewood Rd. Crystal Lake, IL Art Hobson University of Arkansas Fayetteville, AR

Elisha Huggins Etna, NH

David Kagan California State University-Chico Chico, CA David Keeports Mills College Oakland, CA

A. John Mallinckrodt California State Polytechnic University Pomona, CA

Mary Beth Monroe Southwest Texas Junior College Uvalde, TX Rachel Scherr University of Maryland College Park, MD

Stefano Oss University of Trento Trento, Italy

### **Column Editors**

Apparatus Erlend H. Graf Stony Brook University

Book Reviews John L. Hubisz North Carolina State University

Etcetera...

Albert A. Bartlett

University of Colorado, Boulder

Fermi Questions Larry Weinstein Old Dominion University

Figuring Physics
Paul G. Hewitt
City College of San Francisco

For the New Teacher Patty Blanton Appalachian State University

Little Gems Chris Chiaverina New Trier High School

Physics Challenge for Teachers and Students Boris Korsunsky Weston High School, Weston, MA

Websights
Dan MacIsaac
SUNY-Buffalo State College, Buffalo

## The Physics Teacher Statistics

- 9 issues January May, September –
   December 2008 (Volume 46)
- ♦ 640 pages 221 reviewers 116 papers, and 104 contributions to monthly columns (31 international authors/co-authors)
   – 33% acceptance rate
- ↑ 10,125 subscriptions.
- → Approximately 33% of subscribers teach at the college and university level and 40% teach at the high school level. The remaining 27% are scientists at research facilities, students, and other interested members of the physics community.
- ♦ 221 referees

### **Editorial Staff**

Editor
Karl C. Mamola
Appalachian State University
Boone, NC

Senior Editorial Associate Pamela Brown Appalachian State University Boone, NC Assistant Editors Patricia R. Blanton Watauga High School Boone, NC

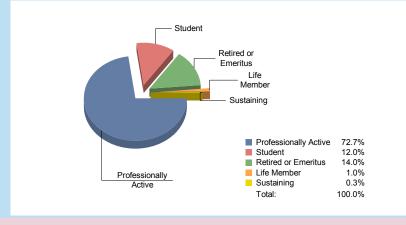
Jennifer Burris Appalachian State University Boone, NC

# Membership

Spanning academia, research, and industry, comprised of educators, Nobel Prize winners, and students alike, our members bring a wealth of experience and individual recognition. Most importantly, all share the same dedication to physics and the physics education community.

### December 2008 AAPT Membership by Member Type

Professionally Active	7,463
Student	1,230
Retired or Emeritus	1,436
Life Member	104
Sustaining	26
Current Membership:	10,259



### Areas of Membership Being Monitored

### Trial Memberships

Current Trial Memberships: 151
Current Comp Memberships: 593

Total: 744

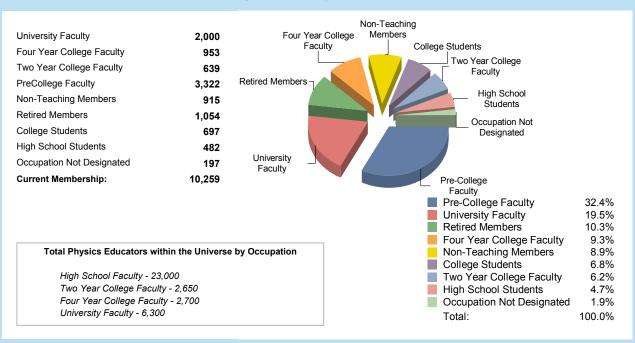
Percentage of Total Membership: 7.24%

### Regular Members Requesting Emeritus Status

	2004	2005	2006	2007	2008	
Regular to Emeritus	47	90	83	80	66	

### December 2008 AAPT Membership by Occupation

with Percentage of Potential Physics Teachers



# **Major Events**

### **Annual Meetings**

Alexander K. Dickison, Program Committee Chair

Winter Meeting: Jan 19-23, 2008, Baltimore, Maryland

Plenaries: Paul Hewitt, "Developing Conceptual Physics," Mario Livio, "Symmetry: From Human Perception to the Laws of Nature," and "Exploring the Energy Frontier at the CERN Large Hadron

Collider" with Kenneth Heller presiding.

Statistics: There were 1229 attendees, 37 exhibitors, 74 sessions, 28 workshops, 6 tutorials, and 66 posters



"The Ruse and the Reality of Nanotechnology," and Mark Freeman, Roger Moore, and Aksel

Hallin "Physics at the University of Alberta."

Statistics: There were 931 attendees, 24 exhibitors, 56 sessions; 38 workshops, 1 tutorial, and 127 posters.

### **Workshops and Conferences**

### Workshop for New Physics and Astronomy Faculty



June 26-29 and Nov. 6-9, 2008 at the American Center for Physics AAPT, in conjunction with the American Astronomical Society (AAS) and the American Physical Society (APS), held two workshops for new physics and astronomy faculty members at the American Center for Physics. This workshop helped nearly 200 new faculty understand how students learn physics and astronomy and suggested how this information can impact a new professor's teaching methods. The workshop is intended for faculty in the first few years of their initial tenure-track appointment at a four-year college or university.

### AAPT/APS Physics Department Chairs Conference

### June 6-8, 2008 at the American Center for Physics

For more than two decades, APS and AAPT have jointly organized a biennial conference for chairs of physics departments to discuss current developments in physics research, education, funding, and public policy, as well as departmental management and local institutional concerns. These conferences have helped maintain an open dialog among physics department chairs on a wide spectrum of issues. In 2008 117 department chairs attended.



### Physics Teacher Resource Agents (PTRA) Workshops

In 2008 the PTRA program participated in a number of Math Science Partnership projects in Arkansas, Idaho, Georgia, Maryland, District of Columbia, Texas, and North Carolina.

### 2008 PTRA Directors:

George Aman, Jan Mader, Karen Jo Matsler, Jim Nelson

# **Programs**

The United States Physics Team Program is a physics community initiative organized by AAPT and funded by member societies of the American Institute of Physics and other generous donors. This program encourages excellence in physics education while rewarding outstanding physics students. High school students compete each year to represent the United States at the International Physics Olympiad competition providing once-in-a-lifetime opportunities for students to enhance their physics knowledge as well as their creativity, leadership, and commitment to a goal.

### 39th International Physics Olympiad

Hanoi, Vietnam, July 20 - 29, 2008

### **U.S. Team Members**

Andrew Lucas (alternate); Kiranmayi Bhattaram, Sway Chen, Joseph Chu, Alesia Dechkovskaia,

Yishun Dong, David Field, Gabriel Karpman, Brian Kong, Kevin Lang, Dan Li, Marianna Mao, Yoon Nam, Anand Natarajan, Thomas Schultz, Jack Wang, James Yang, Alex Zhai, Alex Zorn

### **Coaching Staff**

**Co-Academic Directors:** Robert Shurtz, Paul Stanley **Coaches:** David Fallest, David Jones, Andrew Lin, Junior

Coach: Elena Yudovina

Lab Coaches: Warren Turner, Safa Motesharrei

Medalists (Front row, left to right)

**Silver:** Rui Hu, **Gold:** Edward Gan, Tucker Chan,

Joshua Oreman, Danny Zhu



### **AAPT Physics Bowl**

This year nearly 4000 students participated from schools across the United States, Canada, Japan, and Taiwan. The following prizes were awarded:

First and Second place schools in each region and division receive a \$25 AAPT Store gift certificate and a \$100 gift certificate from Frey Scientific. First and Second Place students (and teacher) in each region and division receive a Texas Instruments TI-30 XS MultiView Calculator. *Winners:* Division I and Division II Top School, Millburn High School, Millburn, NJ (http://www.aapt.org/Contests/upload/PhysicsBowl2008Results.pdf)



### **Team America Rocketry Challenge**

AAPT is proud to be the sole educational partner for the world's largest rocket contest, the Team America Rocketry Challenge (TARC). TARC is also sponsored by the Aerospace Industries Association (AIA), the National Association of Rocketry (NAR), NASA, the Defense Department, and AIA member companies. TARC is an opportunity for science enthusiasts to work together as teams to build and launch rockets, with a chance to win more than \$60,000 in scholarships and prizes. *Winners:* http://www.rocketcontest.org/scores08.cfm. AAPT sponsors the TARC Lesson Plan Contest (http://www.aapt.org/Contests/rocket.cfm).

# **Collaborative Projects**

## **International Science and Engineering Fair**

May 15, 2008 at the Georgia World Congress Center in Atlanta

AAPT/APS Special Awards in Physics and Astronomy at the International Science and Engineering Fair (ISEF) were announced during a ceremony at the Georgia World Congress Center in Atlanta. The fair, held in a different city each May, is the only international science project competition for students in grades 9 through 12. Students qualify to compete by participating in school, local, regional, and/or state science fairs.



Lila Adair chaired a team of Special Awards judges from educational institutions in Georgia.

<u>Top award winners</u> receive a one-year AAPT and APS student membership, a certificate from both AAPT and APS, as well as subscriptions to AAPT's *The Physics Teacher* and other APS journals. Each sponsoring teacher of a student who receives an AAPT and APS award also receives a certificate.

**First Award of \$1,200**: *A Study of Chaotic Behavior Utilizing the Non-Ohmic Properties of the P-N Junction* Michael Anthony Batista, Melbourne Central Catholic High School, Melbourne, FL

Second Award of \$800: Intensity and Temperature Variance in Sonoluminescence

Lyric Elizabeth Gillett, Cornerstone High Homeschool, Houston, TX

Third Award of \$500: Dancing Water Droplets

Te Hsin Tsui, National Hsinchu Girls' Senior High School, Hsinchu, Taiwan, Chinese Taipei

### **Certificate of Honorable Mention**

A Quantum Computational Approach to the Atomic Many-Body Problem, Yale Wang Fan, The Catlin Gabel School, Portland, OR

SQIF Setup for Measurements of Extremely Low Absolute Magnetic Fields, Anne Yuri Polyakov, Ward Melville High School, East Setauket, NY

Novel Characterizations of the Static and Kinetic Behavior of Liquid Marbles: A Potential Utility in Digital Microfluidics, Nilesh Tripuraneni, 17, Clovis West High School, Fresno, CA

# **Physics Days at NSTA**



Local AAPT Sections hosted Physics Day at nearby NSTA area meetings held in Charlotte, North Carolina, Portland, Oregon, and Cincinnati, Ohio.

The Physics Day programs offered a full day of physics content at each NSTA area conference. Physics Day consists of presentations on physics topics of current interest, physics demonstrations for the pre-college classroom, and a make 'n take session where participants can construct a piece of physics apparatus for use as a demonstration or laboratory experiment. AAPT sent a representative to each event, shared appropriate materials, and recruited science teachers as members of the association.

# **Collaborative Projects**

### **ComPADRE**

AAPT proudly supports The ComPADRE Digital Library, a network of free online resource collections supporting faculty, students, and teachers in Physics and Astronomy Education. The Physics Classroom, a high school physics tutorial was added to the collection in 2008. Collections include:

### For Students

- Nucleus Community, scholarships, research, & more
- Physics Classroom, a physics tutorial
- Physics to Go, A bi-monthly online magazine

### For Teachers

- Physics Front, resources for K-12 physics teachers
- Physics to Go, fun physics images & articles
- PSRC, a broad collection of physical science resources

### For Faculty—General

- OSP, Open Source Physics
- PER-Central, Physics Education Research
- PSRC, Physical Sciences Resource Center
- PTEC, Physics Teacher Education Coalition
- uCOMP, Computational Physics

### For Faculty—Courses

- Advanced Labs, Junior and Senior Labs
- Astronomy Center, Introductory Astronomy Course Resources
- Physics Source, Introductory Physics Course Resources
- Quantum Exchange, Quantum Physics Course Resources
- STP, Statistical and Thermal Physics Course Resources



Photo by Ken Vickers



## **Physics Education Research (PER)**

### PERC 2008—Edmonton, Canada

Theme: Physics Education Research with Diverse Student Populations

194 attendees

Presentations included:

"Implementing PER in Other Cultures"

Dewey Dykstra, Boise State University

Andy Johnson, Black Hills State University

"Does PER-based Instruction Help Underrepresented Groups Succeed, and How Can It Do So Better?" Catherine H. Crouch, Swarthmore College

"Developing Learning Skills in the Physics Classroom to Attend to Diverse Populations"

Edit Yerushalmi, Weizmann Institute of Science

Chandralekha Singh, University of Pittsburgh

"It Works There. Will It Work Here?"

Karen Cummings, Southern Connecticut State University

"Applications of PER in Diverse Settings: Perspectives on Audience, Method, and Implementation" Eric Brewe, Florida International University

"Showing Ourselves Friendly: Addressing Race in Physics Culture" Melissa H. Dancy

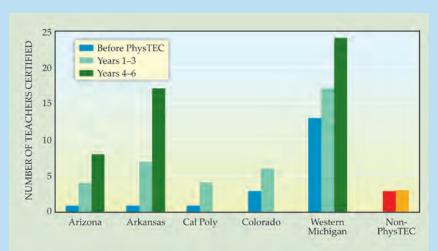


The PhysTEC project completed its seventh year at the end of July 2008. Our funded institutions have achieved a number of significant successes, including:



Photo by Chris Burza

- Doubling, or more, their production of high school physics teachers;
- Using master teachers to develop bridges between their physics departments, education schools, and local K-12 school districts;
- Transforming content and pedagogy courses for future physics and physical science teachers to promote learning through interactive engagement;
- Securing continuing allocation of substantial departmental and institutional resources for teacher preparation programs;
- Measuring project outcomes and disseminating results through publications, presentations, and workshops.



The project has two main efforts: the PhysTEC Institutions and the national Physics Teacher Education Coalition (PTEC). PhysTEC Institutions are selected colleges and universities actively engaged in science preparation of future teachers with substantial project support. Seven institutions have completed their main period of project activities, and are working on disseminating the successes of their projects through presentations, workshops, and journal publications. Five others are currently engaged in developing

their teacher preparation programs into national models. The project hopes to support additional PhysTEC institutions in future years.

PTEC is a national network of over one hundred institutions committed to developing and promoting excellence in physics and physical science teacher preparation. PTEC organizes an annual national conference, as well as smaller regional and topical workshops. In addition, PTEC has teamed up with ComPADRE, the NSF-funded digital library, to produce the PTEC website, which houses a collection of electronic resources in teacher preparation. Please see www.ptec.org for more information and to learn how your institution can join this growing movement.

# **High School Physics Photo Contest**

The High School Physics Photo Contest is open to high school students in grades 9-12 (or equivalent international grade level). Photos may be entered in one of the categories described below, and are judged on the quality of the photo and the accuracy of the physics in the explanation that accompanies the photograph. The 100 finalist photos are displayed and judged during the Summer Meeting.

# **Categories**

*Natural* photos are those that involve everyday situations that may demonstrate a variety of physics concepts. Any spontaneous event is considered natural.

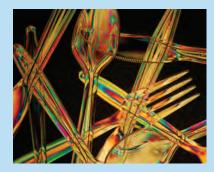






**Contrived** photos are those that are set up to show a particular physics concept or related set of concepts. Contrived photos represent non-spontaneous events.







**Photos with multiple images** or other computer manipulation will be placed in a separate category. They may be displayed at the national meeting and judged for Special Recognition ribbons, but not for prizes.







# **Awards and Grants**

### **Awards and Service Citations**

Floyd K. Richtmyer Memorial Award



2008 Awardee: Vera C. Rubin, senior fellow, Carnegie Institution of Washington

# <u>Presentation Title</u>: Rotating Galaxies and Dark Matter

The Richtmyer Memorial Award recognizes outstanding contributions to physics and their communication to physics educators.

Vera Rubin is an observational astronomer who has studied the motions of gas and stars in galaxies and motions of galaxies in the universe for 75% of her life. Her work was influential in discovering that most of the matter in the universe is dark. She is a member of the National Academy of Sciences, and the Pontifical Academy of Sciences. President Clinton awarded her the National Medal of Science in 1993.

### Paul E. Klopsteg Memorial Award <u>2008 Awardee</u>: Michio Kaku, City College of New York <u>Presentation Title</u>: Physics of the Impossible

The Klopsteg Memorial Award acknowledges outstanding contributions in the communication of the excitement of contemporary physics to the general public.

Michio Kaku is a theoretical physicist, best-selling author, and a major popularizer of science in mainstream media. His latest book, *Physics of the Impossible: A Scientific Exploration of the World of Phasers, Force Fields, Teleportation, and Time Travel,* made the *New York Times* Bestseller list. He has appeared on the BBC's TV series "Time," and the History Channel's "The Universe," and he hosts the radio shows "Science Fantastic and Explorations in Science."



# Excellence in Undergraduate Physics Teaching Award

<u>2008 Awardee</u>: Corinne Manogue, Oregon State University

# <u>Presentation Title</u>: The View From the Other Side of the Mountains: Exploring the Middle Division

This award recognizes outstanding achievement in teaching undergraduate physics.

Corinne Manogue has been a leader in the development and implementation of the Paradigms in Physics Project at Oregon State University. The goals of this project have been a ground-breaking new upper-division curriculum designed to improve students' analytical and problem-solving skills—emphasizing connections between the fields of physics, and incorporating student-centered activities.

# Excellence in Pre-College Physics Teaching Award <u>2008 Awardee</u>: Mark Davids, Grosse Pointe South High School

### Presentation Title: Best Practices

Award recognizes outstanding achievement in teaching precollege physics.

Mark Davids was the 2001 recipient of a Presidential Award for Excellence in Science Teaching from the White House and National Science Foundation in 2001. He was chosen by the Michigan Science Teachers Association as its 2008 Outstanding High School Teacher. Mark coauthored *Physics: Principles and Problems* with Paul Zitzewitz and Robert Neff, and *Teaching About Lightwave Communications* with Paul Zitzewitz.

# AAPT Distinguished Service Citations <u>Winter Meeting 2008</u>: Dewey Dykstra, Andrew Jackson Graham, Jr., Tom Senior, Chuck Stone, Barbara Wolff and Jonathan Reichert, and Mike Wolter

<u>Summer Meeting 2008</u>: Dean Baird, Anne Cox, Karen Jo Matsler, Harry Manos, Steve Shropshire, and Richard Zitto

The program recognizes AAPT members for their exceptional contributions (e.g., committee, section, or editorial work) to physics education.

# **Awards and Grants**

### Medals

### Hans Christian Oersted Medal



2008 Awardee: Mildred
Dresselhaus, Institute
Professor of Electrical
Engineering and Physics at
MIT, Cambridge, MA
Presentation Title:
Expanding the Audience for
Physics Education

The Oersted Medal recognizes those who have had an outstanding, widespread, and lasting impact on the teaching of physics.

Robert A. Millikan Medal <u>2008 Awardee</u>: Eric Mazur, Harvard University <u>Presentation Title</u>: The Make-Believe World of Real-World Physics

The Robert A Millikan Medal recognizes those who have made outstanding scholarly contributions to physics education



Melba Newell Phillips Medal <u>2008 Awardee</u>: Judy Franz, Executive Officer, American Physical Society, College Park, MD



Judy Franz served as President of AAPT in 1990. She is a condensed matter physicist and has served as the Executive Officer of APS since 1994. In that position, she is actively involved in education, outreach, diversity, public affairs, and international programs. The medal is

presented in recognition of her creative leadership and dedicated service that have resulted in exceptional contributions to AAPT.

# **Grants and Scholarships**

### **AAPT Venture Fund**

The Venture fund is a resource for AAPT members, created to promote the development of innovative teaching products and services for physics and other sciences. The fund provides one project up to \$25,000 in total support. The Venture Fund focuses on assuring a marketable product and its timely availability to the teaching community. http://www.aapt.org/Grants/venturefund.cfm

# Barbara Lotze Scholarship for Future Physics Teachers

AAPT awards this scholarship to high school seniors or undergraduate students who plan to become physics teachers and who are U.S. citizens attending a U.S. school. Two successful applicants will each receive a stipend of up to \$2,000.

http://www.aapt.org/Grants/lotze.cfm

### Frederick & Florence Bauder Endowment

This endowment makes it possible for AAPT members to receive funding to support special activities in the area of physics teaching. Activities include local workshops, grant projects, distribution of innovative apparatus for physics teaching, etc.

http://www.aapt.org/Grants/bauderfund.cfm

### **High School Physics Teacher Grant**

The grant(s) are given each year to teachers whose proposal meets the goal of the grant. That is, the procedure should result in better teaching practice, student understanding and interest, and/or increased enrollment. Awardees will receive anywhere from \$100 to \$500 per award. http://www.aapt.org/Grants/hsgrant.cfm

### Harold Q. & Charlotte Mae Fuller Fund

This endowment fund was created to enhance the internationalization of AAPT membership and is intended to benefit physics teachers in developing countries. The individual(s) who are selected will have their full membership dues paid and receive *The Physics Teacher* (or the *American Journal of Physics*, if they prefer) for a period of two years.

http://www.aapt.org/Grants/fullerfund.cfm

# **Fundraising**

### Special Thanks to Our 2008 Donors

**Individual Donors** James Adkins Steven Adler Carl Albright John Alexander Ralph Alexander Philip Allen Harvey Alperin Ethan Alyea Joseph Amato Lawrence Badar Jonathan Bagger William Bardeen Vernon Barger Robert Barker James Barnes David Bartlett Gordon Baym

Ikaros Bigi Martin Block Kenneth Bloom Mary Boas Randy Booker Fred Boos Charles Bordner L. Bradford

John Beam

Santiago Bernal

Richard Bradley Ann Brandon Howard Brandt Sue Broadston Bert Brown Robert Brown Ronald Brown Daryl Bruflodt Fernand Brunschwig Spencer Buckner **Dmitry Budker** George Bundick Patricia Burchat Stephen Burns James Butt **James Button** Robert Cahn

Don Cameron

David Campbell Antony Chang

Lai Chen Elizabeth Chesick Chien-Ho Chou Howard Chun Richard Close Charles Cole David Cone David Cook

Joseph Coster

Robert Cotts

Dan Cross Thomas Csermely David Cutts

Victor Crawford

Teymour Darkhosh Charles Davis Debra Davis William Davis Dave De Bruyne Richard Decoster Cheryl Dellai

Mary Derengowski-Stein

Dwain Desbien Charleton Detar Francesco Di Giacomo Alexander Dickison Karim Diff

Ernest DiMicco Lance Dixon Danijel Djurek John Donaldson Peter Dougherty David Easley **Guy Emery Charles Emmert** Lester Evans Cathy Ezrailson Alfred Fa'arman Thomas Ferbel Andrew Ferstl Rick Field Gaston Fischer Kurt Fisher Wayne Fisher Richard Fizell

Allen Flora

Kenneth Ford

Gustave Fralick

Ricardo Francke Christine Frank Enoch Frankhouser

Judy Franz
A. French
Tim French
Al Friebe
Herbert Fried
Kenneth Friedman
Henry Frisch
Klaus Fritsch
David Fry
Eiichi Fukushima
Wendy Fuller-Mora

Wendy Fuller-Mor Mary Gaillard Richard Galik Dionigi Galletto L. Garcia-Colin Carl Gardner

Carl Gardner
C. Garretson
John Garrett
Zvi Geller
Dolores Gende
Ted George
Thomas Gibbons
Sarah Gilbert
Robert Godwin
Marvin Goldberger
Edwin Goldwasser
George Gollin

David Goodstein

Howard Gordon

Paul Gordon
David Goss
Kurt Gottfried
Richard Gottfried
Christopher Gould
Harvey Gould

Zbigniew Grabowski
Paul Grannis
Michael Greer
David Griffiths

Leo Grike
J. Gruenebaum
Julio Guemez
Nicholas Hadley
Toufic Hakim
Joseph Hamilton

Tao Han
Richard Hanau
Ann Hanks
Beverly Hartline
Mary Hartmann
L. Haughney
William Hawkins
Danny Hawley
Warren Hein
Paul Helenski
Frances Hellman

Ehsan Helmy

Carl Helrich James Hendrickson Carlos Herran Martinez

James Hicks Richard Hodson Donald Holcomb Barry Holstein Herbert Hoover John Hubisz Charles Hunt Douglas Huston Joseph Incandela Laura Jacobs Kenneth Johnson Roger Jones Janice Kaliski Robert Kammerer John Kaplan Inga Karliner Dorothy Kearney Stephen Kelly Mark Kern John King Paul Kingsbury

Toichiro Kinoshita Janos Kirz Bruce Kittams Robert Klein T.C.W. Kleinsteuber Robert Knox Carl Kocher Robert Komada Rikio Konno Stephen Kral Andreas Kronfeld Harry Lam



Greg Landsberg Kenneth Lane Richard Lane Donald Lauffer Kenneth Laws John Layman Keum-Hwi Lee Harvey Leff James Leigh Harold Leinbach Barbara Levi **Edwin Lewis** Olga Livanis Charles Lombardo Matthew Lowry Kam-Biu Luk Vera Luth Ntungwa Maasha

A. John Mallinckrodt A. James Mallmann Karl Mamola Paul Mangelsdorf Myron Mann Diane Markoff Richard Martin Timothy Marvin Bruce Mason Wesley Mathews Katherine Mays Lillian McDermott Christopher McKee Mark Meisel

Kenneth Mellendorf Joe Meyer Peter Meyers

Walter Mellen

Marina Milner-Bolotin Dominick Misciascio Charles Misner Raj Misra Mary Mogge Michael Moldover Mary Monroe Frederick Montana Dornis Morin **James Morris** Robert Morse Steven Moss Mark Moverman

Jimmie Myers Carl Napolitano Charles Nelson Marvin Nelson **Ieff Newmever** Paul Nielsen Erick Noriega Halis Odabasi Boris Okun **Jean Oostens** Alan Oppenheim Michael Osborne Philip Ousley Paul Parker Richard Partridge

**Emmanuel Paschos** R. Pedigo Leno Pedrotti Roscoe Peithman Carlos Pena Cesar Perez Michael Peskin Horia Petrache Joseph Polchinski Jack Potenza **Bobby Powell** Betty Preece Frederick Priebe Milind Purohit Chris Quigg Rajendran Raja Ronald Rank Neville Reav Don Reeder John Rees

Shawn Reeves Donald Regula Pascal Renault Shahzad Riaz Deborah Rice Carl Rigney Darlene Ritchie Richard Roberts Charles Robertson Roderick Robertson Richard Robinett John Roeder Thomas Rokoske

Ronald Roll

Martin Romeo Carl Rosenfeld Jonathan Rosner Thomas Rossing Mohamed Said Kamal Sardashti Richard Saucier

**Jeff Saul** 

David Savickas Heidi Schellman John Schutt

Hugh Scott Stephen Sears Raymond Serway Andrew Sessler Peter Shaffer

Ramamurti Shankar **James Sharber** Yitzhak Sharon Giles Shepherd Bruce Sherwood Carl Shinners Melvyn Shochet Elizabeth Simmons Kurt Sinclair Dennis Sivers

Lary Smith Leonard Spector David Spitzer Frieda Stahl Morton Sternheim Robert Stewart

David Smith

Thomas Stinchcomb

**James Stith** Paul Stokstad David Stover Denis Strenzwilk Harry Stuckey Folden Stumpf Evan Sugarbaker Jerry Sullivan Richard Talman Francis Tam

James Taylor Julius Taylor R. Taylor David Thiessen Nancy Tigner

David Tillay Ian Tobochnik Javier Torner Virginia Trimble Michael Turner

Jean-Francois Van Huele

Lisa Vecchio Christine Vernier Konstantine Vlahokostas

Howard Voss Paul Voytas Robert Wagner David Wallach Mario Walter William Walton

Robert Webb Steven Weinberg Richard Weiner

Antonio Weingartshofer

Edwin Whalin Scott Willenbrock **Jeffrey Williams** Paul Williams Harry Woodcock Wayne Wright Jose Wudka Gail Wyant Patrick Wyant Douglas Wylie Anne Young

Lawrence Younghouse

Chet Zach

William Zimmermann

Paul Zitzewitz Alma Zook Earl Zwicker Anonymous (6)

**Corporate Donors** 

Herbert V. Friedman, Inc. John Wiley & Sons, Inc. McGraw-Hill, Inc. PASCO/Scientific

Pearson Higher Education **Princeton University Press** 

Texas Instruments University of Rochester

Vernier Software & Technology

# **Committee Contributions**

Committees are essential to AAPT. In addition to committees that advise and oversee operations, such as Publications, Awards, and Budget, there are those that focus on advancing physics education. There are currently 18 Area Committees, each with nine members who hold staggered three-year terms: One new member is appointed each year by the Nominating Committee and two are appointed by the incoming president. Their responsibilities range from developing academic content for the meetings to acting as stewards for their particular area of interest.

### 2008 Area Committee Chairs

### **Committee on Apparatus**

Samuel M. Sampere

Syracuse University, Syracuse, NY

### **Committee on Educational Technologies**

Michelle Strand

Southeast Community College-Milford, Lincoln, NE

### Committee on Graduate Education in Physics

R. Steven Turley

Brigham Young University, Provo, UT

### Committee on History & Philosophy of Physics

T. B. Greenslade Jr.

Kenyon College, Gambier, OH

### **Committee on International Education**

Genaro Zavala

Tecnologico De Monterrey, Monterrey NL, NLE, Mexico

### **Committee on Laboratories**

A. James Mallmann

Milwaukee School of Engineering, Milwaukee, WI

### Committee on Minorities in Physics

J. D. Garcia

University of Arizona, Tucson, AZ

### Committee on Physics in High Schools

Patrick T. Callahan

Frenchtown, NJ

### Committee on Physics in Pre-High School Education

**Thomas Foster** 

Southern Illinois University-Edwardsville, Edwardsville, IL

### Committee on Physics in Two-Year Colleges

Karim Diff

Santa Fe Community College, Gainesville, FL

### Committee on Physics in Undergraduate Education

Stephen D. Luzader

Frostburg State University, Frostburg, MD

### **Committee on Professional Concerns**

Patricia T. Viele

Cornell University, Ithaca, NY

### Committee on Research in Physics Education

Charles Henderson

Western Michigan University, Kalamazoo, MI

### Committee on Science Education for the Public

Stanley J. Micklavzina

University of Oregon, Eugene, OR

### Committee on Space Science and Astronomy

Kevin M. Lee

University of Nebraska - Lincoln, Lincoln, NE

### **Committee on Teacher Preparation**

Eugenia Etkina

Rutgers, The State University of New Jersey, New Brunswick, NJ

### Committee on the Interests of Senior Physicists

Richard W. Peterson

Bethel University, St. Paul, MN

### Committee on Women in Physics

Brian A. Pyper

Brigham Young University - Idaho, Rexburg, ID



### **2008 Advisory Committees**

### **Audit Committee**

Alan M. Gibson, Chair Dwain M. Desbien Warren W. Hein, Ex Officio Mary Elizabeth Mogge Gordon P. Ramsey

### **Awards Committee**

Harvey Leff, Chair Lila Adair Dwain Desbien Al Gibson Steve Iona

### **Bauder Endowment Committee**

Paul W. Zitzewitz, Chair Elizabeth B. Chesick Raymond A. Polomski Joseph Spaccavento

### **Committee on Governance Structure**

Harvey Leff, Chair Lila Adair Al Gibson Warren Hein, Ex Officio Steve Iona Mary Mogge Gordon Ramsey

# Committee on SI Units and Metric Education

Gordon J. Aubrecht, II, Chair Bartley L. Cardon Robert A. Nelson James F. Sullivan

### **Finance Committee**

Paul Zitzewitz , Chair Warren W. Hein, Ex Officio Harvey S. Leff Gerald F. Wheeler Dwain Desbien

### **Governance Review Committee**

Mary Beth Monroe, Chair Ernest Behringer Tom Foster Roderick Grant Charles Henderson Margaret (Peggy) Hill Bernard Khoury Richard Peterson



### **Investment Advisory Committee**

Paul W. Zitwzewitz, Chair Warren W. Hein, Ex Officio Bernard V. Khoury Mary Elizabeth Mogge Deborah J. Rice Charles E. Robertson

### **Meetings Committee**

Richard Peterson, Chair David Cook Alexander K. Dickison Tiffany Hayes, Ex Officio Warren Hein, Ex Officio Mary Beth Monroe Tomas L. O'Kuma Michael Thoennessen James H. Nelson Terry Singleton

### Membership and Benefits Committee

Alan M. Gibson, Chair
Valerie M. Evans, Ex Officio
John D. FitzGibbons
Warren W. Hein, Ex Officio
Steve Iona
Doug Lombardi
Todd R. Leif
David W. McDonald
Mary Elizabeth Mogge
William T. Waggoner
Jeffrey J. Williams
Paul W. Zitzewitz
John W. Zart

### **Nominating Committee**

Sandra Harpole, Chair Larry Kirkpatrick, Vice Chair Jan Madar Steve Turley Joseph Spaccavento Ntungwa Maasha

### **Physics Bowl Advisory Committee**

Mike Faleski, Chair Thomas J. Senior James O. Vermillion

### **Publications Committee**

Steven Iona, Chair
Robert J. Beichner
Juan R. Burciaga
Linda Dylla, Ex Officio
Marilyn B. Gardner, Ex Officio
Warren W. Hein, Ex Officio
Harvey S. Leff
A. John Mallinckrodt
Karl C. Mamola
Bruce A. Mason
Mary Elizabeth Mogge
Gordon P. Ramsey
Roger H. Stuewer
Paul W. Zitzewitz

### **Review Board**

Harvey Leff, Chair Lila Adair Alex Dickison Warren Hein, Ex Officio Gordon Ramsey

# **AAPT Sections**

# Forty-seven sections increase the impact of AAPT at the regional level.



AAPT currently has 47 sections spread from Alaska and Canada to Puerto Rico. AAPT's Sections vary in population from less than 50 to more than 500 members. Some sections follow geopolitical boundaries, serving a province, a state or a territory. Others may serve part of a state or areas as large as six combined states. AAPT members' activity in their local sections strengthens physics education. Sections provide an outstanding opportunity to interact and network with other local physics educators. Acting together we are much stronger and have a bigger impact on physics education.

### Alabama Section

Charles E. Hanke, President Stanley Jones, Section Rep.

### Alberta Section

Vladimir L. Pasek, President Terry Singleton, Section Rep.

### **Appalachian Section**

Pam Sharma, President Gregory Puskar, Section Rep.

### Alaska Section

James Pantaleone, Section Rep.

### **Arizona Section**

Karie Meyers, President David K. Weaver, Section Rep.

### Arkansas-Oklahoma-Kansas Section

N. Sanjay Rebello, President Todd R. Leif, Section Rep.

### **British Columbia Section**

Rachel Moll, Section Rep.

### **Central Pennsylvania Section**

Lynn K. Aldrich, Section Rep.

### **Chesapeake Section**

Deonna Woolard, President David Shaw Wright, Section Rep.



### Florida Section

Jane Bray Nelson, President Sherry L. Savrda, Section Rep.

### **Hawaii Section**

Michael F. Weber, President James L. Redmond, Section Rep. Duane Merrell, President Harold Taylor Stokes, Section Rep.

### **Indiana Section**

Elaine Gwinn, Section Rep.

### **Iowa Section**

Wade Sick, President John W. Zwart, Section Rep.

### **Kentucky Section**

Akhtar Mahmood, President Richard Gelderman, Section Rep.

### **Long Island Section**

Edward McDaniels, President William B. Lynch, Section Rep.

### Louisiana Section

John Thacker, President Rhett J. Allain, Section Rep.

### **Michigan Section**

Drew Isola, President Alan M. Gibson, Section Rep.

### Minnesota Section

Andy Rundquist, President Leonardo Hsu, Section Rep.

### Mississippi Section

Jim Sabatiert, President Sandra Harpole, Section Rep.

### **Missouri Section**

Pat Gibbons, President James M. Borgwald, Section Rep.

### **Montana Section**

David W. McDonald, Section Rep.

### **New England Section**

Martina B. Arndt, President Laura M. Nickerson, Section Rep.



AAPT 2008 Annual Report



### **New Jersey Section**

Raymond A. Polomski, President Joseph Spaccavento, Section Rep.

### **New York Section**

John D. FitzGibbons, Section Rep.

### **North Carolina Section**

Anthony W. Crider, President Mario J. Belloni, Section Rep.

### North Dakota Section

Larry Cook, President Donald L. Hoff, Section Rep.

# Northern California-Nevada Section

Claudia Winkler, President Paul Robinson, Section Rep.

### **Ohio Section**

Mary Kay Patten, President Myra West, Section Rep.

### **Ontario Section**

David W. Doucette, President Marina Milner-Bolotin, Section Rep.

### **Oregon Section**

Dedra N. Demaree, President Patrick S. Keefe, Section Rep.

### **Puerto Rico Section**

Yvette Rios, President

### **South Dakota Section**

Molly TenBroek, President Joel D. Rauber, Section Rep.

### Southeastern Pennsylvania Section

Paul Angiollio, President Ling Ling Liang, Section Rep.

### **Southern Atlantic Coast Section**

Ntungwa Maasha, Section Rep.

### Southern California Section

William J. Layton, President Mary Elizabeth Mogge, Section Rep.

### Southern Ohio Section

Jennifer Blue, President Kathleen A. Harper, Section Rep.

### **Southwestern Section**

Alex F. Burr, Section Rep.

### St. Louis Section

Jim Cibulka, President J. Mark Schober, Section Rep.

### **Tennessee Section**

James Parks, President Spencer L. Buckner, Section Rep.

### **Texas Section**

Eric A. Hagedorn, President Thomas L. O'Kuma, Section Rep.

### **Washington Section**

Michael Jackson, President Keith Clay, Section Rep.

### Western Pennsylvania Section

John W. Heard, Section Rep.

### **Wisconsin Section**

Paul Nevins, President A. James Mallmann, Section Rep.









Acting together we are much stronger and have a bigger impact on physics education.

# **Financials**

# The American Association of Physics Teachers, Inc. Audited Balance Sheet Year Ended December 31, 2008

(With comparative totals for 2007)

	December 2008	December 2007
ASSETS		
Cash and Cash Equivalents	\$423,124	\$566,529
Investments	3,294,138	5,968,662
Receivables, Net		
Grants	188,151	166,086
Due from affiliate	41,044	85,013
Membership	25,309	15,021
Other	9,655	9,655
Inventory	146,094	88,815
Prepaid Expenses	43,969	111,575
Investment Interest in ACP	7,622	-
Property and Equipment, Net	120,808	196,214
TOTAL ASSETS	\$4,299,914	\$7,207,570
LIABILITIES & NET ASSETS		
LIABILITIES		
Accounts Payable and Accrued Expenses	554,670	734,581
Accrued Payroll and Related Liabilities	460,233	209,362
Unearned Revenue	1,558,914	1,689,089
Capital Lease	14,610	21,824
Investment Interest in ACP, Inc.	-	146,758
Deferred Compensation Obligation	74,986	83,776
Accrued Postretirement Benefit Obligation	359,197	234,773
TOTAL LIABILITIES	\$3,022,610	\$3,120,163
NET ASSETS		
Unrestricted		
Undesignated	719,647	3,370,046
Board designated	125,972	231,615
o de la companya de l	845,619	3,601,661
Town and the Destricted		54.061
Temporarily Restricted Permanently Restricted	431,685	54,061 431,685
refinaliently Restricted	1,277, 304	431,685 4,087,407
		_,,
TOTAL LIABILITIES & NET ASSETS	\$4,299,914	\$7,207,570

# **Financials**

# The American Association of Physics Teachers, Inc. Audited Statement of Activities Year Ended December 31, 2008 (With Comparative Totals for 2007)

	Unre	stricted				
		Board	Temporary	Permanently	2008	2007
	Undesignated	Designated	Restricted	Restricted	Total	Total
Revenue & Support:	Ü	Ü				
American Journal of Physics	\$1,251,994	-	-	-	\$1,251,994	\$1,186,127
The Physics Teacher	811584	-	-	-	811,584	773,092
Investment Income(Loss)	(1,294,488)	(101,001)	(32,806)	-	(1,428,295)	363,786
Other Publications	150,929	-	-	-	150,929	312,663
Meetings, workshops and projects	549,215	-	-	-	549,215	774,965
Memberships	719,397	-	-	-	719,397	631,514
Federal Grants	1,177,761	_	_	_	1,177,761	1,475,830
Contributions	225,200	15,673	2,224	_	243,097	295,439
International Physics Olympiad	139,061	-	· -	_	139,061	120,432
Share in earnings of	154,380	-	-	-	154,380	163,960
Investment in ACP						
Miscellaneous Income	1,388	-	-	-	1,388	1,647
Net assets released from restrictions	43,794	(20,315)	(23,479)	-	-	<u>-</u>
Total revenue and support	3,930,215	(105,643)	(54,061)		3,770,511	6,099,455
Expenses:						
American Journal of Physics	696,444	-	-	-	696,444	887,263
The Physics Teacher	748,840	-	-	-	748,840	527,694
Other Publications	899,667	-	-	-	899,667	1,059,704
Meetings, workshops and projects	1,206,475	-	-	-	1,206,475	1,779,131
Memberships	846,187	-	-	-	846,187	552,663
Federal Grants	1,456,316	-	-	-	1,456,316	1,522,862
General and administrative	517,680	-	-	-	517,680	917,925
Fundraising	84,581	-			84,581	2,777
Total Expenses	6,456,190	-			6,456,190	7,250,019
Change in net assets before effect of						
adoption of SFAS No. 158	(2,525,975)	(105,643)	(54,061)	-	(2,685,679)	(1,150,564)
Effect of adoption of recognition						
provision of SFAS No. 158	(124,424)	_	_	_	(124,424)	(63,947)
F					(===)===/	(44),, -1,
Change in net assets	(2,650,399)	(105,643)	(54,061)	_	(2,810,103)	(1,214,511)
Net Assets:						
Beginning	3,370,046	231,615	54,061	431,685	4,087,407	5,301,918
Ending	\$719,647	\$125,972		\$431,685	\$1,277,304	\$4,087,407
Litating	Ψ/17,01/	Ψ123,772		Ψ131,003	Ψ1,2//,30-1	Ψ1,007,107

# **Financials**

# The American Association of Physics Teachers, Inc. Audited Schedule of Functional Expenses Year Ended December 31, 2008 (With Comparative Totals for 2007)

	Program Services	General & Administrative	Fundraising	2008 Total	2007 Total
Compensation expense	\$1,293,018	\$1,170,540	\$52,516	\$ 2,516,074	\$2,484,067
Travel	351,300	133,547	-	484,847	521,063
Consultants, contracts and tempora	ary 204,912	63,253	1,200	269,365	776,974
Editorial office expense	500,253	_	-	500,253	302,655
Participant travel and stipends	323,782	184	-	323,966	275,010
Publication costs	305,721	(300)	-	305,421	588,162
Postage, packaging and shipping	193,401	2,511	-	195,912	231,564
Debt Service	-	252,855	-	252,855	259,738
Photocopying and printing	59,794	14,548	150	74,492	156,108
Honoraria	135,173	-	-	135,173	129,463
Rental operating expenses	-	189,637	-	189,637	138,563
Computer supplies and maintenance	ce 1,068	156,879	-	157,947	169,295
Professional Fees	30,413	149,104	-	179,517	100,837
Audio/visual	51,627	1,321	-	52,948	61,315
Advertising	78,414	-	106	78,520	111,333
Online journal services	97,977	-	-	97,977	203,171
Depreciation	-	83,766	-	83,766	54,495
Materials and supplies	46,608	6,213	22	52,843	60,783
Conferences, meetings, and worksh	nops 47,147	13,660	-	60,807	51,993
Dues and memberships	61,462	1,961	72	63,495	52,440
Publishing services	55,120	-	-	55,120	126,101
Awards	53,538	2,500	-	56,038	60,990
Other facility costs	13,321	1,275	-	14,596	49,805
Bank fees	14	49,021	-	49,035	36,058
Telephone	11,583	8,850	-	20,433	20,429
Office services	-	45,557	-	45,557	32,656
Exhibit and meeting expenses	21,810	-	-	21,810	12,362
Investment expenses	-	19,241	-	19,241	44,518
Insurance	2,347	23,210	-	25,557	25,715
Storage	17,115	3,552	-	20,667	50,168
Security	4,972	-	-	4,972	2,231
Equipment and maintenance	23	139	-	162	-
Royalty expense	774	1,693	-	2,467	952
Other	1,418	43,302	-	44,720	59,005
Allocation of indirect costs	1,870,700	(1,901,215)	30,515	-	
<b>Total expenses</b>	\$ 5,834,805	\$536,804	\$ 84,581	\$6,456,190	\$7,250,019



One Physics Ellipse 301.209.3333 **aapt.org**