2011 Illinois Science Education Conference

October 27-29, 2011
Conference Center
Tinley Park, IL

This a joint meeting of the Illinois Science Teachers Association (ISTA), the Illinois Section of the American Association of Physics Teachers (ISAAAPT), the Chicago Section of the American Association of Physics Teachers (CSAAPT), the Illinois Association of Chemistry Teachers (IACT), the Illinois Association of Biology Teachers (IABT), and the Environmental Education Association of Illinois (EEAI). There are over 160 presentations in a variety of topics and lengths.

The deadline for presentations has passed (it was on June 15) and the registration deadline is Oct. 15. Details may be found on the ISAAAPT website: http://www.isaapt.org/

The presentation of the Outstanding High School Physics Teacher Award was postponed until this meeting. We will have a business meeting on Friday afternoon; the council meeting is Thursday evening at 8 p.m.

For more information, maps and directions, registration forms, hotel information, and the program, see our website: www.isaapt.org

Future ISAAAPT Meetings

- Spring 2012 – Univ. of Illinois at Urbana-Champaign
- Fall 2012 – Joliet Junior College, Joliet
- Fall 2013 – Illinois State Univ., Normal

If you are considering being a host for a future meeting, please contact Dave Sykes at dave.sykes@llcc.edu

Future Chicago section meetings

- Fall 2012 – Joliet Junior College (joint with ISAAAPT)
- See: http://www.neiu.edu/~csaapt/

Future national AAPT meetings

- Winter 2012 – Feb. 4-8 – Ontario, California
- Summer 2012 – July 28 - Aug. 1 – Philadelphia
- Winter 2013 – Jan. 5-9 – New Orleans, LA
- Summer 2013 – July 13-17 – Portland, OR
- http://www.aapt.org/Conferences/meetings.cfm

APS Prairie section meetings

- Fall 2011 – Nov. 10-12 – University of Northern Iowa, Cedar Falls, IA
- See: http://www.aps.org/units/psaps/index.cfm
Local Physical Science Alliances

Our concept of “Local physics alliances” has been expanded to become Local Physical Science Alliances, involving teachers in other areas of physical science. A Mission Statement has been adopted: To provide networks for teachers of physical science to explore curricular and instructional resources and strategies, as well as pure and applied research and innovations, in order to promote excellence in teaching and learning of the physical sciences throughout Illinois.

The LPSAs for Illinois is now a joint initiative of the Illinois Science Teachers Association (ISTA) (Gwen Pollock, President), the Illinois Section of the American Association of Physics Teachers (ISAAPT) (Carl J. Wenning, Past President), and the Illinois Association of Chemistry Teachers (IACT) (Leonard Freidhof, President, and Rodger Baldwin, Past President).

The following Aims for Illinois 2011-2012 have been adopted:
• Reducing teacher isolation through collaborative relationships
• Identifying and addressing teacher and student needs
• Improving physical science education in grades 9-16

This new initiative offers you the chance to meet and learn from other teachers in your region. See the web site for a list of “zone leaders” who have committed their time to help you build an LPSA in your part of the state:

http://www.phy.ilstu.edu/lpsa/index.html

Of particular interest is a list of resources to help you build your zone. See the website and click on the link for “Resources for LPSA leaders.”

For examples of the kind of events that are useful to your local teachers, see the description of meetings held by LPSA Zone VI Blooming/Normal over the last year. One meeting used energy as a theme, and included handouts on energy-related activities for all physical science teachers, followed by a lab on kinetic energy. Subsequent meetings dealt with waves, stoichiometry, physics at amusements parks, and video analysis of 2-d motion.

Zone VI, in cooperation with the Illinois State University Physics Department, the ISU Center for Mathematics, Science, and Technology (CeMaST) and whiteboardsUSA.com offered two free two-day Modeling Method of Physics Instruction workshop on June 6/7 and June 13/14, 2011. Participants received curricular materials, six tumble buggies, complimentary lunches, and daily refreshments during the working sessions. Door prizes were made available by whiteboardsUSA.com. Participants studied scientific procedures, constant velocity motion, and uniformly accelerated motion. A follow-up Saturday workshop is planned for the autumn. For more on Zone VI activities, see:

http://www.phy.ilstu.edu/lpsa/zone6.html
Jay Walgren named Illinois High School Physics Teacher of 2011

Jay Walgren, of Vernon Hills High School, Vernon Hills, IL, will receive the 2011 Outstanding High School Physics Teacher Award at the Fall meeting in Tinley Park. The award has been delayed from the spring meeting because the dates of that meeting coincided with his school's spring break.

UIUC Saturday Physics Honors Program

The Saturday Physics Honors Program, an outreach program for high school students, is also open to the general public. The lectures are free of charge and are scheduled from 10:15 a.m. to 11:30 a.m. in Room 141, Loomis Laboratory of Physics, 1110 West Green Street, Urbana, Illinois. See:

http://physics.illinois.edu/outreach/honors/

Call for Nominations for Outstanding High School Physics Teacher Award

Each school year the Illinois Section of AAPT is pleased to receive nominations for outstanding high school physics teachers in the state. Fellow teachers and school administrators who are aware of exceptional performance and enthusiastic student response are encouraged to fill out the online nomination form found on the ISAAPT website. The person who is nominated will be notified and asked to fill out the online candidate information form. Please note that the deadline for receiving nominations is December 1, 2011. The teacher who is selected will be notified and presented with the award at the spring 2012 meeting of the Section.

ISAAPT Guidebook Program

This program provides resource guides to qualifying teacher candidates at the request of an Illinois PTE program administrator. For details see:

http://helios.augustana.edu/isaapt/guidebook.html

Call for Nominations for the 2012 Distinguished Service Citation

We invite and encourage you to nominate a fellow colleague for the 2012 Distinguished Service Citation to be presented at the fall 2012 ISAAPT meeting. Please send your nomination by February 1, 2012, so that the Council might consider the candidates at the spring meeting. For guidelines, see the “Distinguished Service Citation” link on the ISAAPT website: www.isaapt.org

The Physics Front!

The Physics Front provides high quality resources for the teaching of physics and physical sciences courses, and is a free service provided by the AAPT in partnership with the NSF/NSDL. Find it at

http://www.thephysicsfront.org/

AAAPT NEWS eNNOUNCER

http://www.aapt.org/aboutaapt/ennouncer/index.cfm

2012 Physics Teacher Education Coalition Conference: New Paradigms for Physics Teacher Education

The PhysTEC Conference features workshops, panel discussions, and presentations by national leaders. There will be a session on the report of the PhysTEC Task Force on Teacher Education in Physics, due to be released later this fall. The 2012 conference will be held February 3-4, in conjunction with the AAPT Winter Meeting.

ISAAPT listserv

To subscribe, send the following message to listserv@ilstu.edu, being certain to turn off your signature:

SUBSCRIBE isaapt-1
Minutes of the Spring 2011 ISAAAPT Executive Council Meeting
Saturday, April 2, 2011
Eastern Illinois University

Call to Order: President Doug Brandt called the meeting to order at 7:06 a.m. Council Members present: Past President Carl Wenning, President Elect and Newsletter Editor Brian Davies, Secretary/Treasurer Dave Sykes, Section Representative Tom Foster, High School Representative Ann Brandon, Tom Carter, Andrew Morrison, Deb Lojkutz, Don Reid, Noella D’Cruz, Ken Wester, and Jeff Chamberlain.

E-Action Items: Fall, 2010 Council Meeting Minutes: Andrew Morrison moved to approve the Executive Council Minutes of the Fall 2010 council meeting at Sherrard High School on November 5, 2010. Tom Foster seconded the motion on the same day. The motion was declared passed on November 19.
Fall 2010 Business Meeting Minutes: Ken Mellendorf moved to approve the Business Meeting Minutes on January 9, 2011. Carl Wenning seconded the motion on the same day. The motion was declared passed on January 17.

Secretary-Treasurer Report: Dave reported on the financial status of the ISAAAPT. Currently there is $4,425 in the treasury and the Rossing Fund has a balance of $35,103. Dave added that the Rossing Fund has increased by over $5,000 in the last 6 months. This is due to the AAPT moving the money from low interest-bearing funds (with significant fees) to a high yielding long term fund invested in stocks and bonds. A motion to approve the treasurer’s report was made by Carl and seconded by Ann. The motion passed without discussion.

Section Representative Report: Tom Foster reported on his attendance to the National AAPT meeting held in Jacksonville, Florida.
1.) In the section reps meeting, attendees made progress reports and discussed the role of sections in their relationship with the AAPT.
2.) In the council meeting, members approved of a new affiliate – the Illinois State Physics Project (ISPP). Ann added that the ISPP typically meets monthly around the Chicago area and the meetings are basically a “Physics Teacher Show and Tell.”

High School Representative Report: Ann Brandon reported that the committee has spent 90% of its time on preparing to fill seven (7) workshops and five (5) sessions for the next AAPT meeting.

Publicity Chair and Webmaster Report: Dave Renneke was unable to attend but sent a report as outlined below:
1.) The Augustana server continues to work well.
2.) The home page for the Fall 2011 meeting at Tinley Park on Oct. 27-29 has been up since early February. The online Call for Presentations has been active since March 15 with a deadline of June 15. Program Chair Paul Ritter reviews submitted material and determines the program schedule.
3.) The ISTA is hiring someone to organize the online registration which will begin on May 1 and end on Oct. 15.

Newsletter Editor Report: Brian Davies reported that 110 copies of the spring newsletter were delivered – three (3) directly, six (6) by email, and the rest by mail. Brian did not request a reimbursement for the cost of duplicating and mailing.

Outstanding High School Teacher Award: Doug reported (speaking for Cliff Parker) that Jay Walgren had been selected as the 2011 Outstanding High School Teacher Award. He added that Jay was unable to attend the meeting so he would receive his award at the Fall 2011 meeting. 

Committee for the Distinguished Service Citation: Brian Davies reported that the committee will review possible candidates as they are nominated.

Nominating Committee: Carl Wenning reported that he is looking for possible candidates for council positions that are opening in the fall. He added that he is hopeful of having some contested positions – something that has not happened in many years.

Current Meeting Update: Doug reported that there were 121 online registrants and a few walk-ins and he believed that the meeting would yield a profit but that he was not in a position to say how much.
Old Business:

Liability Insurance: Dave Sykes reported that he will pay the ISAAPT liability insurance as the premium comes due.

Memorandum of Agreement (MOA): Andrew reported on the status of the MOA with the ISTA. (Council members had received the MOA via the list serve and were asked to review it before the meeting.) Carl reported that his understanding was that the ISAAPT would receive a percentage of the proceeds of the Fall Meeting in proportion to the number of ISAAPT members attending. Brian moved to include the above “formula” for revenue sharing with the ISTA in the MOA. Tom Foster seconded. Doug Brandt, Andy Morrison, and Carl Wenning were authorized by the Council to finalize the wording. The motion passed. Andrew moved to approve of the MOA as amended with the motion above. Don seconded. Don asked what other sections were covered by this MOA. Andrew stated that it was his impression that the ISTA was dealing with each section separately but felt the wording of the MOA with each section should be essentially the same. The motion passed. Doug had to excuse himself from the meeting to attend the first session. As per the by-laws, President-Elect Brian Davies took over conducting the meeting.

Incorporation: Brian deferred Doug’s report on the ISAAPT becoming incorporated to the next council meeting.

Fall Meeting Update: Carl reported that the fall, 2011 meeting at Tinley Park is expected to draw over 1000 teachers, of which the majority will be elementary and middle school teachers. Tom Foster asked about the invited speakers. Andrew stated that the ISAAPT has been allocated two six-hour sessions and the ISTA will get the keynote speaker. He added that how we fill our sessions is our responsibility (i.e. we can have invited speakers as usual).

Local Physical Science Alliances (LPSA): Carl reported that Zone 6 is active with about 15 members regularly attending meetings. Carl added that ISU, in cooperation with Zone 6, will be conducting a free two day workshop, dealing with the Modeling Method of Physics Instruction, in June.

ISAAPT Logo: Tom Carter reported that the ISAAPT did not get selected by the College of Dupage’s Graphic Arts Department to develop a Section logo. Carl moved to engage a commercial artist to produce a logo for the ISAAPT at a cost not to exceed $600. The motion was tabled as several members voiced concerns about the need for a new logo and what a typical cost for developing a logo was. Tom Foster volunteered to investigate options for getting a logo produced.

Upcoming meetings: Future ISAAPT meetings are as follows:
- Fall, 2011: Tinley Park, October 27-29 (Joint with ISTA, CSAAPT, and IACT).
- Spring, 2012: University of Illinois, Champaign, TBA.
- Fall, 2012: Joliet Junior College, TBA.
- Fall, 2013: Illinois State University, TBA.

Tom Carter reported that the proposed meeting with the Wisconsin Section for the Spring of 2013 at Yerkes Observatory is off as the Wisconsin Section already has a schedule of meetings through 2015.

ISAAPT Mirror Website: Andrew reported that he and Dave Renneke continue to work on the ISAAPT Mirror Website.

Adjournment: The meeting was adjourned at 8:25 a.m.

Faithfully submitted,

Dave Sykes, Secretary/Treasurer, ISAAPT
Absentee Ballot for 2011 ISAAPt Elections

For the first time in recent memory, there will be contested elections for most of the positions on the ISAAPt Executive Council. Quite a few individuals put their names forward or were nominated for positions of President Elect, High School Representative, 2-year College Representative, 4-year College Representative, and Section Representative following this year’s call for nominations.

Election for these offices will be formally held at the Illinois Science Education Conference – a joint meeting of ISAAPt, CS AAPt, IACT, ISTA, and IBTA and other regional groups – in Tinley Park during the Section’s business meeting on October 28th. In addition, absentee balloting will be permitted prior to the 2011 election by those who will not be in attendance at the ISEC meeting. Absentee balloting was approved by action of the Executive Council effective September 6th. Only current dues paying members will be allowed to vote in these elections, and all ballots will be validated. See the section below for information about the absentee balloting process.

The following individuals are running for the respective positions. They were all asked to provide a one-paragraph description to provide additional information upon which voters can make their decisions.

PRESIDENT ELECT

Andrew Morrison, Joliet Junior College, Joliet, IL: I am going to be teaching starting this fall at Joliet Junior College. I have been attending ISAAPt meetings since 2001, and have been on the Executive Council with the ISAAPt for the past 2 years. I believe that the ISAAPt is a dynamic organization that is at the forefront of helping teachers to improve their ability to help students learn physics. My vision for the future of the organization is that we continue with our mission and look for ways in which we can improve our services to teachers. I would like to explore ways in which our organization can grow by attracting new teachers and bringing in modern ideas and methods to our meetings and section activities. It has been a pleasure to serve this community, and I look forward to continuing to serve in any capacity.

Don Reid, Lincolnwood High School, Raymond, IL: My teaching career started right after graduating from Eastern Illinois University in 1982 in Monmouth for one year. I then taught at Abingdon for a year, Chatham for 7 years, Vandalia for a year, and finally my home town of Carlinville for one year. During that time I received a Masters in Physical Science Education from EIU. After that I worked at the Educational Service Center in Springfield for 2 years and the Regional Office of Educations in Macoupin/Greene/Calhoun/Jersey and Christian/Montgomery counties for 11 years. There my main responsibility was to coordinate In-Service training for teachers in the areas of Math, Science, and Educational Technology for K-12 teachers. I am pleased to say I am finishing my career back in the classroom teaching Physics, Chemistry, and freshman physical science (I.P.S.) at Lincolnwood High School in Raymond. During the first 1/3rd of my career I joined ISAAPt and was active not only as a presenter at meeting but also as a High School Rep. While at the ESC/ROE I let my membership lapse. Now that I am back in the classroom, I have rejoined ISAAPt and I have been pleased to get re-acquainted with old friends as well as see new faces. I am once again presenting at meetings and serving as High School Rep. In addition, I hosted the Spring 2010 meeting at Blackburn College in Carlinville. At the spring 2011 meeting, I was asked to run for president (elect) and I would welcome the opportunity to serve the ISAAPt as president and would appreciate your vote.
4-YR COLLEGE REPRESENTATIVE  (NB: If Andrew Morrison becomes president elect, then the runner up in the 4-year college representative election will complete his unexpired term.)

Morten Lundsgaard, UIUC, Urbana, IL:  I earned my PhD degree in physics from Kansas State University in 1995. After three years as post doc in the Netherlands, I returned to my native Denmark in 1999. In Denmark I taught high school physics, mathematics, and astronomy for eight years. In 2007 I returned to USA, joining the science educational group at University of Michigan as research associate, and since 2009 I have been at UIUC in a joint position between the Physics Educational Research group and the Office for Mathematics, Science, and Technology Education. After joining ISAAPT in 2009, I have worked as zone leader for the LPSA-project. Initiatives that support local communities of physics teachers are extremely important. I will work on making available to such projects the resources of 4-year colleges. Also, new standards for high school science call for more cross-disciplinary interaction, so I support expanding our collaboration with organizations representing other STEM fields.

Thomas R. Roose, Trinity Christian College, Palos Heights, IL:  I have a Ph.D. from Stanford University (1982) and have worked in industry (20 years), taught high school math and science (6 years) and taught college physics and statistics (4 years). While in industry, I managed research at many of the leading colleges, universities and consultants. I am currently Chair of the Physics Department at Trinity Christian College, where I recently initiated a physics minor curriculum. I believe that ISAAPT is central to advancing physics teaching because as resources become more limited, we need a central place where we can share ideas and inspire each other to more effective teaching methods. I think that we need to make sure that our physics teaching contributes to AAAS' (American Association for the Advancement of Science) Project 2061, aimed at having all Americans becoming scientifically literate by 2061. It is imperative that college, high school, middle school, and elementary school faculty work together to ensure that the content for the IL state science content and teaching standards are met. We need to couple mathematics and science curricula, using problem-based learning, so that these disciplines can be viewed together as jointly advancing physics understanding. I have taught both high school and college science and mathematics. I have used problem-based learning and can help the ISAAPT become even more influential in advancing physics teaching and in the appreciation of physics in our everyday lives.

Charles Schulz, Knox College, Galesburg, IL:  I am currently Professor and Chair of the Department of Physics at Knox College. As a long-time member and past president of ISAAPT, I understand and greatly value its role in supporting and improving the teaching of physics at the high school, 2-year college, and 4-year college/university level in Illinois. I have benefited greatly from membership in the Section through participation in its meetings and workshops and through the contacts I have made over the years. Many of my students have also benefited from attending and presenting their research at section meetings. As it has been a number of years since my last service as a member of the Council, I would very much like to again contribute to the health and indeed growth of the organization, and would look forward to doing so if elected to the Council.
2-YR COLLEGE REPRESENTATIVE

Richard Ross: I’ve been teaching community college physics and astronomy for twenty-eight years. In addition to ISAAPT, I’m a full member of AAPM, a member of the IAI Physics Panel, and a board officer of the MWCHPS. I have the following goals: (1) Results of a survey that I conducted at an ISAAPT meeting last year suggest a significant disparity among facilities available for the instruction of astronomy. I intend to survey astronomy programs statewide to compare facilities available for instruction. (2) I’ll establish a physics and astronomy archive for audio/visual materials to be shared within the ISAAPT. This would serve as a resource to donate and/or borrow educational media recorded in older formats (e.g. VHS, audio cassette, Super 8, etc.). (3) Recent changes to the requirements for certification of physics teachers allow those certified in other disciplines to teach physics after completing minimal coursework in physics. I hope to promote a discussion of certification requirements.

HIGH SCHOOL REPRESENTATIVE (NB: If Don Reid becomes president elect, then the runner up in the high school representative election as you will complete his unexpired term.)

Rodger Baldwin, Clinton High School, Clinton, IL: Rodger Baldwin currently teaches Physics at Clinton Community High School and has previously taught Physics at Glenwood High School in Chatham, and University High School in Normal, Illinois. He has served as a workshop co-leader introducing high school teachers to the Modeling Method of Physics Instruction and intermediate teachers to Operation Physics materials. Rodger has been a cooperating teacher for student teachers pursuing physics education certification, and has thoroughly enjoyed interfacing with supervising professors from physics education programs. He would appreciate the opportunity to serve as a high school representative to the Illinois Section of the American Association of Physics teachers.

Tom Holbrook, University High School, Normal, IL: Tom Holbrook has been teaching physics at University High School in Normal for the past thirty years. During that time he has worked very closely with the Illinois State University Physics Teacher Education (PTE) program mentoring pre-service teachers and conducting workshops. Tom is a PTRA and a National Board Certified Teacher. He has won numerous teaching awards including the ISAAPT Outstanding Physics Teaching award in 1998. In 2008, he was presented the Presidential Award for Excellence in Mathematics and Science Teaching (PAEMST) by President Bush. Mr. Holbrook has been an active member of AAPT since 1983.

SECTION REPRESENTATIVE

Zak Knott, Joliet Central High School, Joliet, IL: I have been teaching high school science for 10 years, and am currently teaching Physics 1 and 2 at Joliet Central High School. I have been a member of ISAAPT since 2000 and have served as a high school rep as well as section rep. I look forward to the opportunity to continue bringing news of the wonderful things that are happening in our section back to the national organization!