

Executive Committee Meeting Minutes
91st Semi-annual Symposium
132nd Meeting of NYSS/APS
Namm Hall President's Conference Room
October 15, 2004

Time: 9:00 AM

Members present: Chair, Enrique Galvez(Colgate University); Vice Chair, James Owens(05); Section Councillor, Gianfranco Vidali; Secretary-Treasurer, Larry Josbeno; Executive Committee: Lawrence Brehm (07); Steve Duclos (05), Jim Hannon (05), William Kilgore (05), Jill Linz (07); Jay Newman (07), Zohreh Parsa (05), Guests: Roman Kezerashvili (New York City College of Technology, CUNY), (Fall Symposium chair, 2004), George Thurston (RIT), (Spring Symposium Co-chair, 2005)

Members absent: Michael J. DeMarco (05), Sunil Labroo (05), Joel Kubby (07), Stacie Nunes (05) and David Trauernicht (07)

1. Approval of minutes from the Brookhaven National Laboratory, October 17, 2003

Motion to approve: Jim Hannon, Steve Duclos, Unanimous

2. Report of the Local Committee

- Report of local organizers
 - Roman Kezerashvili arranged the agenda and speakers.
 - Pre-registration is 145, 78 banquet tickets have been sold, with many local members expected. There are 66 students registered. There are banquet tickets available.
 - Sponsor's for this Symposium include the New City College of Technology, the OTHMER INSTITUTE FOT INTERDISCIPLINARY STUDIES – Polytechnic University (\$996.00 for attaché cases), Yeshiva (\$500), US Department of Health (\$400.00), teach Spin (\$200.00), and Prentice Hall, (Saturday's lunch, up to \$1,000.00).
 - Exhibitors: Prentice Hall, McGraw Higher Education, TeachSpin and the US Army Medical Department.
 - The local organizing committee was (from Polytechnic University) Stephen Arnold(from City Tech, CUNY) Roman Kezerashvili, (chair), Reginald Blake, Daria Bouadana, Vladimir Boyko, LuFeng Leng, Gregory Metloff and (from Yeshiva) Gabriel Cwilich
- Student support – The following policy, that was approved Spring 2003 will be followed;
 - Student support will be a maximum \$150 per student, with discretion on the part of the student support coordinator on the amount. Banquet will be \$6 for pre-registered students (with certification by a faculty member at the institution).
 - Jim Hannon reported that 13 students have request support.

- Posters – Thirty-one (31) posters have been submitted. Judges are needed. Three volunteers were obtained. Roman Kezerashvili (local committee), Enrique Galvez and William Kilgore.

POLICY: (PASSED October 15, 2004) the judging committee may award prizes (up to \$600) FOR POSTERS (no more than \$100 per poster), categories at the discretion of the judges.

THE FOLLOWING AWARDS WERE ANNOUNCED AT THE BANQUET:

Graduate Student Category :

1st place \$100
Mayumi Noto
Polytechnic University
Optical Micro cavity as a Protein Molecular Weight Sensor

1st place \$100
Magdalena Djorjevic
Columbia University
Heavy Quarks at RHIC and LHC

2nd place \$50
Hsuan-Yeh Chang
City College of New York
Transport in a Spin Polarized Luttinger Liquid in the Presence of a Single Impurity

Undergraduate Category:

1st Place \$100
Fatima Mahmood
Union College
Neutral Meson Analysis of Photo production from the Proton

2nd place \$50
Catalina Peralta
Hofstra University
Silver Wire Activation of the Excitable BZ Reaction

2nd place \$50
Alex Zaharakis
Hofstra University
Temporal Pattern of Ectopic Activity in a Simple Cardiac Cell Model of the Heart

2nd place \$50
S. Luo

Sarah Lawrence College
Comparison of Mean Nan particle Size Determination Methods

3rd place \$25
Kevin Faehndrich
Ithaca College
Cesium Magnetometer Surveys at a 1000-Year-Old Pithouse Village in South West New Mexico

3rd place \$25
Greg Shear
Reduction of Parallax Error in Cesium Magnetometer Surveys Using Laser Alignment

3rd place \$25
Andrew Benedict
Rowan University
Computer Controlled Timing for Ultra cold Plasma Experiments

3. Report from Spring Symposium 2003 - Mike DeMarco

On 16-17 April, 2003, SUNY- Buffalo State College hosted the jointly convened Spring 2003 symposia of the NYSS-APS and NYSS-AAPT in Buffalo, New York. The theme of the co-convened meeting was "What Physics Education Research says to Physicists and Physics Educators," and the conference was organized by Dan MacIsaac, Mike Demarco, David Henry and Dewayne Beery of the SUNY-BSC Physics and Elementary Education Departments.

One hundred and thirty registrants attended presentations by national and regional PER scholars and industrial physicists conducting physics training and outreach. Suzanne Brahmia (Rutgers), Ewart Leblanc (Xerox), Michael Neuschatz (AIP) and John Lacek (Kodak) spoke on recruiting and retaining under-represented populations; Dewey Dykstra (Boise State), Ron Thornton (Tufts), Richard Steinberg (CCNY) and Karen Cummings (S CT State) presented research on learning physics and Bob Beichner (NCSU), Dan MacIsaac and Kathleen Falconer (Buffalo State) described various application of PER in the physics classroom. The keynote speaker was Randy Knight (Cal Poly) who spoke on taking PER from the laboratory to the classroom in a public evening session at the nearby Buffalo Historical Museum.

The jointly convened meeting and conference was quite well received, with considerable attendance and positive comment from Western New York regional physicists and teachers. John Wiley and Prentice Hall publishing donated several PER titles for free distribution to attendees, and Addison-Wesley (Pearson) publishing financed travel for the keynote speaker. Papers, PowerPoint slides, programs and photographs from the conference are available online at <http://physicsed.buffalostate.edu/pubs/AAPTmtgs/NYSS/Apr2004NYSSPERconf/>. Further conference details can be had from <macisadl@buffalostate.edu>.

See <http://physicsed.buffalostate.edu/pubs/AAPTmtgs/NYSS/Apr2004NYSSPERconf/ConfPhotos/2004symposium.htm>, for specific choices and captions, we suggest

<[http://physicsed.buffalostate.edu/pubs/AAPTmtgs/NYSS/Apr2004NYSSPERconf/ConfPhotos/images/full%20size/symposium%20\(49\).jpg](http://physicsed.buffalostate.edu/pubs/AAPTmtgs/NYSS/Apr2004NYSSPERconf/ConfPhotos/images/full%20size/symposium%20(49).jpg)>

CAPTION: Ewart LeBlanc (Xerox) discusses physics outreach lessons for minority students in high needs, urban schools

<[http://physicsed.buffalostate.edu/pubs/AAPTmtgs/NYSS/Apr2004NYSSPERconf/ConfPhotos/images/full%20size/symposium%20\(23\).JPG](http://physicsed.buffalostate.edu/pubs/AAPTmtgs/NYSS/Apr2004NYSSPERconf/ConfPhotos/images/full%20size/symposium%20(23).JPG)>

CAPTION: Dewey Dykstra (Boise State University) discusses Physics

Education Research-based curricular development and impact

<[http://physicsed.buffalostate.edu/pubs/AAPTmtgs/NYSS/Apr2004NYSSPERconf/ConfPhotos/images/full%20size/symposium%20\(79\).jpg](http://physicsed.buffalostate.edu/pubs/AAPTmtgs/NYSS/Apr2004NYSSPERconf/ConfPhotos/images/full%20size/symposium%20(79).jpg)>

CAPTION Dewey Dykstra (Boise State), Bob Beichner (NCSU), Dan MacIsaac,

Kathleen Falconer and Mike Demarco (Buffalo State)

4. Secretary/Treasurer Report - See report attached at end.

5. Newsletter report - Zohreh Parsa

There will be a December 2004 Newsletter.

The deadline for articles will be extended until October 22, 2004. Larry Josbeno will send an e-mail to all NYSS members on Monday, October 18, 2004.

6. Report by the Nominating Committee

APS NYSS Nominating Committee Report

October 25, 2004

Committee: Owens, Brehm, Mooney, Newman, Vidali

Officers (automatic)

Section Councillor: Gianfranco Vidali (Syracuse)

(voting member of APS Council; two more calendar years to go of four-year term)

Chair (2-year term): Jim Owens (Torrey Pines Research)

Officers (running)

Vice-Chair (2-year term): Bob Pompi (SUNY Binghamton)

Sec-Treas (4-year term): Larry Josbeno (Corning CC)

Section Council Observer (non-voting; 2-year term): Kiko Galvez (Colgate)

Exec Committee, 4-year terms ending 2007 :

Larry Brehm (SUNY Potsdam)
Joel Kubby (Xerox)
Jill Linz (Skidmore)
Jay Newman (Union)
Dave Trauernicht (Kodak)

Exec Committee, terms ending 2005, would like to run for another term:

Dave DeMarco (SUNY Buffalo State College)
Sunil Labroo (SUNY Oneonta)
Stacie Nunes (SUNY New Paltz)

Exec Committee, terms ending 2005, do not plan to run:

Steve Duclos (GE)
Jim Hannon (IBM)
Bill Kilgore (Brookhaven NL)
Zohreh Parsa (Brookhaven NL)

Exec Committee candidates:

Azar Alizadeh (GE)
Scott Heinekamp (Wells College)
Savi Iyer (SUNY Geneseo; chair of spring 03 symp)
Roman Kezerashvili (CUNY City Tech; chair of fall 04 symp)
Mike Rogers (Ithaca College)
Cindy Schwarz, Vassar (AAPT NYS Chair-Elect 2004-07).
George Thurston (RIT; chair of spring 05 Symp)

Appointed offices:

Archivist: Jill Linz
Newsletter Editor: Zohreh Parsa
Outreach: Stacie Nunes

Schedule:

Dec. 1: Candidate statements due
Dec. 15: Postcard mailed listing candidates and requesting further nominations
Jan. 15: Ballots sent out
Feb. 28: Ballots counted
April 16: New members take office at end of Spring 2005 Symposium.

By-Laws Specifications for Section Councilor and Section Council Observer

(1). The three largest Sections provide, in rotation, a voting **Section Councillor** for a four-year term on the APS Council.

Hence the NYS Section has a voting Section Councillor for 4 out of every 12 years. Gianfranco has completed 2 years of such a 4-year term as Section Councillor.

(2.) In the election years when the NYS Section IS eligible to provide a Section Councillor, a **Section Council Observer** shall be nominated and elected for a two-year term in the same manner as other Section officers, except (unlike the Sec-Treas) he cannot be re-elected. Hence we send **two** members to the APS Council during the four years when we provide a voting Section Councillor.

(3). In the election years when the Section is **NOT** eligible to provide a Section Councillor, the outgoing Chair of the Section will become the Section Council Observer for a two-year term.

(4) The Sections have a voting Councillor on a rotating basis and that we don't have one for some years after Gianfranco, though we do send a Council Observer.

7. Future Symposia Kilo Galvez

The following future sites and topics were approved:

- i. Spring 2005 Symposia – April 15/16, 2005
FRONTIERS IN SQUISHY PHYSICS (Soft Condensed Matter)
Rochester Institute of Technology;
George Thurston, Mike Kotlarchyk, Scott Franklin; Co-chairs
- ii. Fall 2005 Symposium – October 14-15, 2005
ALBERT EINSTEIN AND HIS LEGACY
Colgate University; Chair Kilo Galvez

New Business

8. Report from APS - Gianfranco Vidali, Council Advisor.

- i) Gianfranco attended the APS Council meeting in Denver (April 30, 2004):
 - a. There are still concerns on visa problem for foreigners coming to the US to study or do research.
 - b. APS is working on long range (5-10 years) planning. As the Sections are concerned, a greater degree of communication among them was recommended. Gianfranco suggested that a good venue for meeting and discussing matter related to the Sections would be the Annual Units Convocation, usually held each year towards the end of January at College Park, Maryland. Obviously the duration of the meeting, currently set at one day, would have to be lengthened.
 - c. 2005 is the World Year of Physics. APS helps coordinating activities in the US. The contact person is Alan Chodos (associate Executive Officer, chodos@aps.org).

- d. Funding for physics research continues to be a problem. The President (Bush) said he would double the funding of NSF but the current budget deficit makes this goal unattainable in the near future. However, Michael Lubell (of the Washington Office of APS) gave two positive items to consider;
 - (1) Writing to your Congress person asking him/her to support science is effective;
 - (2) APS is considered in high regard on the Hill.

iii) The next scheduled meeting is in November at Seattle. If there are any issues e-mail them to Gianfranco.

iv) An amendment of the APS By-laws passed. The Executive Board (of APS) no longer will need to approve additional fees for non-members attending an APS Meeting. The text is (with amended parts in red): Article XI Meetings and Endorsed Conferences 5. Meeting Registration Fees - Division, Topical Group, Forum, or Section Secretary-Treasurers, or others responsible for arrangements of Society, Division, Topical Group, Forum, or Section Meetings shall, in cooperation with the Executive Officer, fix the registration fee for such Meetings. In general, non members of the Society shall pay a surcharge to be set each year roughly equal to the APS membership dues paid by regular members.

9. Outreach Grants

There were three requests for Outreach Grants, which were given this year in conjunction with AAPT/NYSS to a maximum of \$2,000.00. The selection committee was Larry Josbeno, Kiko Galvez and Jill Lintz.

i) Dudley Observatory, requested a \$2,000.00 grant for equipment and educational materials needed to expand the Rising Star Internship program. The Dudley Observatory New Paltz, New York, submitted this proposal to the Outreach Grants Committee for a \$2000 grant for equipment and educational materials needed to expand their Rising Star Internship program. The interns provide public astronomy education programs in their communities. This program, which we funded two years ago, has been very successful and well-received.

Project Summary

The Rising Star Interns learn to use telescopes to find interesting celestial objects to show and describe at star parties. (A Star Party is an event where astronomers get together and invite the public to come and view the heavens.) Each intern who demonstrates proficiency with the material and fulfills our service requirements is awarded a telescope to keep, so that they may continue this as a life-long pursuit.

They are in a novel position to bring physics-related learning experiences to the general public, and in particular to K-12 students, since the programs reach out to adult members of the community through their school-age children with a learning experience that can be enjoyed and appreciated by all ages. The grant will help them reach a larger audience. It will allow more students to explore a possible career in science. More importantly, it will allow students to participate in providing public science education in the schools and community right now

MOTION: (By committee) To fund all \$2000.00, (\$1,000.00 @ from AAPT/NYSS and APS/NYSS) seconded by William Kilgore. Unanimous!

ii) Gloversville High School

A new class offered at Gloversville High School uses the inquiry method to introduce students to physics concepts and the applications of these concepts in their daily lives. The class consists of juniors and seniors who attend vocational training and might not otherwise study physics in high school. The students study optics and electricity in the first term and mechanics and energy in the second. The request is for funding to purchase equipment such as cameras, toys, sports equipment and cell phones that can be used to illustrate physical principles and emphasize their application.

MOTION: (By committee) To fund all \$800.00, conditionally, (improved description of use of equipment), (\$400.00 @ from AAPT/NYSS and APS/NYSS). seconded by William Kilgore. Unanimous!

iii) Ithaca High School

I. Title of Proposal: Peer Research and Presentations

II. Total amount requested: \$839.75

Principal Proposer:

Name: Deborah F. Lynn

Institution: Ithaca High School

Position: AP Physics Instructor

PROJECT SUMMARY:

To enhance the AP Physics program by providing students with an opportunity to explore one particular area of interest in physics with a research project followed by a presentation of their project to their peers. Students will be expected to find an interesting way to demonstrate an aspect of physics that they have learned during the course or another aspect that they are interested in learning more about.

Students will become actively engaged in research and engineering, trouble shooting unanticipated problems during the design and building stage, and interpreting results they may not have expected. The projects evolved into a springboard for conversations with graduate students, local area university researchers, and various faculty at the high school, thereby infusing excitement into the classroom atmosphere.

Students presented their work to their class and other classes. They will be the experts in their area and students and teacher alike will learn a great deal from these presentations.

to apply textbook learning to the pursuit of their own interests. I want them to communicate what they have learned to others in an effective manner.

Planned Activities:

Students will be pursuing a variety of projects of their own choosing, with teacher approval. All projects must involve the demonstration of some aspect of physics. Students will present their work to their peers. All students must also hand in a notebook detailing their daily work and a final written report of their work in a specified format, including their plans for the classroom demonstration. Presentations must involve some preplanning as to how they expect to engage their peers in the presented work, for example with questions for the audience and a planned, logical order to the presentation.

Students will be engaged in many activities, depending on their particular projects. These include literature searches and reading, discussions with experts in their area of interest, design and construction, daily journal writing on their work using a teacher-specified format, data acquisition and analysis using a variety of techniques, writing of a final report, presentations using a variety of techniques including power point presentations, video presentations, and hands-on demonstrations to enhance their talks.

A sampling of some of the projects completed last year:

Finding the resonance frequency to successfully shatter a glass
Designing and building a magnetic rail gun
Building a 4-foot tall Tesla coil
Building a flashlight powered by electromagnetic induction
Using LEDs in reverse orientation to experiment with the photovoltaic effect
Solar car construction
Building motors and generators
Research reports on the physics of baseball and black holes
Construction of an optical-acoustic transducer
Demonstrating superconductivity
Analysis of the forces involved with a skateboard jump using video data
Construction of a trebuchet and analysis of the physics of the motion
Construction and analysis of rockets
Building electro-acoustic transducers
Geared clock design and construction
Construction of hydraulic arm
Construction of a binary counter

MOTION: (By committee) To fund all \$839.75, (\$419.87 @ from AAPT/NYSS and \$419.88 from APS/NYSS), seconded by Zohreh Parsa . Unanimous!

10. Elections:

(a) Secretary Josbeno will send a postcard and e-mail to all NYSS members on December 10, announcing the Nominating Committee's slate and requesting further nominations. The Committee consists of Vice-Chair J. Owens (Chair), G. Vidali, L. Brehm, J. Newman, and P. Mooney (representing the APS Council).

(b) Electronic Balloting (Larry Josbeno). The election will be held electronically, with paper ballots to those requesting them. Information on the process will be e-mail to all Executive members by Secretary Josbeno.

11. Plaque/Recognition for Rich Galik.

(a) Flowers will be sent by Secretary Josbeno.

(b) Plaque, in recognition of Rich Galik's service to this organization and the total Physics Community will be purchased by Enrique Galvez and presented by Kiko and Larry Josbeno.

12. The meeting adjourned at 12:20 PM. Motion to adjourn Lawrence Brehm, Seconded by Zohreh Parsa. Unanimous!

Respectfully submitted,

Larry Josbeno, Secretary-Treasurer

NEW YORK STATE SECTION
AMERICAN PHYSICAL SOCIETY

Treasurer's Report – October 15, 2004

Assets with APS as of 8/31/2004 were \$62,438.66, a decrease of \$774.62 from a year ago.

Expenses since that accounting:

Printing Services \$1,876.27

Mail service \$568.00

Total \$2,444.27

Approximate balance \$59,994.39

NYSS - Membership

1999 – 1,962

2000 – 1,886

2001 – 1,906

2002 – 1,856

2003 – 1,842

2004 - 1,871