



**NEW YORK STATE SECTION
AMERICAN PHYSICAL SOCIETY**

Executive Committee Meeting Minutes
113th Semi-annual Symposium
154th Meeting of NYSS/APS
September 11, 2015
Vassar College, Poughkeepsie, NY

Time: 9:00 am

Members Present: Chair: Bruce White (17); Executive Committee: Harold Hastings (19); Carl Ventrice (17); Jenny Magnes (19)

Members Absent: Erica Simoson (17); Gianfranco Vidali (17); Abigail Flower (17); Michael Hennessy (17); John Noe (17); Sunil Labroo (17); Kenneth Podolak (17); Michael Rogers (19); Shashi Kanbur (19); Samuel Amanuel (19);

Quorum was not present

1. Approval of minutes of the Executive Committee Meeting at the 2015 Spring Symposium at SUNY-Fredonia:

Quorum was not present. Corrections to the minutes were noted and approval will be handled by email vote.

2. Review of Steps Taken to Action Items :

3. Report of the Local Committee – Jenny Magnes (Vassar College):

- a. Preliminary numbers for this meeting: about 50 attendees, 40 for the banquet.
- b. **Posters – see Appendix A**
 - (i) Reminder of the policy: (PASSED October 15, 2004 with amount revised at the last meeting) the judging committee may award prizes (up to \$800) for posters in categories at the discretion of the judges. A poster judging committee was formed:
 - (ii) Results of posters judging – **See Appendix A**
- c. **Student support**
 - (i) There were a no requests for travel support from students;
 - (ii) Reminder of the policy passed at the Executive Committee Meeting, Spring 2013 **Overall student support maximum is increased to \$150 per student for travel and hotel. To encourage pre-planning, student support requests received two weeks prior to the symposium will receive full consideration for full reimbursement of expenses (double occupancy and ride sharing) pending availability of funds. Students are expected to pursue alternative sources of funding also. The total amount to be allotted per symposium for this purpose is \$2500. Amounts exceeding this need prior approval of the Executive Committee.**

4. Secretary/Treasurer's report – Reported by Bruce White for Gianfranco Vidali

Quorum was not present. The report of the Secretary/Treasurer was read to the committee members present. At the end of July 2015, the latest financial statement available from APS shows we have \$62,222.63. At the same time last year we had \$53,914.22. Dues from APS amount to \$9,620 vs. \$10,096 a year ago. Currently there are 2405 NYSS members, slightly below the year 2014 number, which is 2524 members. The percentage of NYSS members with respect to the total APS

membership declined from 4.99% to 4.67%. The investment income is \$1,069.84 vs. \$963.06 for the same period a year ago. The total revenue (APS dues, registration fees, banquet, investment) for 2014 (full year) was \$16,480.47 vs. \$15,097.91 for 2013. Expenses (food, travel grants, outreach grant) for 2014 were \$10,651.78 vs. \$8,453.65 for 2013. Although there are fluctuations from year to year, both revenues and expenditures have declined in the last four years, but expenditures more than revenues, yielding a higher net.

	2015 (7/31/2015)	2014 (7/31/2015)	2014 (full year)	2013 (full year)
Total assets	\$62,222.63	\$53,914.22	\$52,422.60	\$46,668.91
Revenue	\$13,284.84	\$14,410.44	\$16,480.47	\$15,097.91
Expenses	\$3,559.81	\$7,090.13	\$10,651.78	\$8,453.65

Example of costs incurred for organizing recent Symposia (figures are not final). Symposia net balance is the difference between income (registration, banquet tickets, host institution contribution) and expenditures connected with running the event (printing, catering, user fees)

SUNY-Oswego:

- Symposium net balance: -\$934.87;
- Other expenses: \$2,743.88 (student travel: \$812.27; poster awards: \$400; Outreach: \$1531.61);
- **Total cost: \$3,678.75**

SUNY-Plattsburgh:

- Symposium net balance: -\$1,980.54
- Other expenses: \$1,217.14 (student travel: \$426.39; speaker travel: \$290.75; poster awards: \$500.00)
- **Total cost: \$3,197.68**

SUNY – Fredonia:

- Symposium net balance: \$473.43
- Other expenses: \$ 5,143.78 (outreach grant: \$2,143.00; student travel: \$850.94; speaker travel: \$1,749.84; poster awards: \$400.00)
- **Total cost: \$4,670.35**

As a reminder, most of the income comes from membership (about \$10,000/year), while most of the expenses are for running the Symposia, student and speak travel support, poster awards and outreach grants. If our goal is to fund about one Outreach grant/meeting (\$2,000 per meeting), then to keep an even balance we need to contain Symposia deficits to about \$1,000 per Symposium.

Ideally, we would like to have a net about twice the operating budget. Since our net keeps increasing, at the 2013 Fall meeting I proposed the following steps to increase outlays:

- Increase the number and size of the Outreach grants;
- Increase the financial support for students to attend Symposia;
- Allocate a budget for partial travel reimbursements for speakers at Symposia

Since then, we

- a. Increased the size of Outreach grants to \$2,000 per grant; we recommended to increase the visibility of our Outreach Program via the distribution of the newsletter to colleges and universities in NYS.
- b. At the Spring 2013 meeting we decided to increase the student support maximum for attending symposia to \$150. The total financial support is capped to \$2,500.
- c. We agreed at the Spring 2014 meeting that the Section would provide funds for speakers' travel expenses not exceeding a total of \$1,000. It is recommended that funds for speakers' travel expenses be sought from institutions.

5. Future Symposia

- a. Sarah Lawrence College - Interaction of Art and Physics - Scheduled for April 1-2, 2016.
- b. RIT (Scott Franklin) - In discussions regarding hosting and potential topics (Optoelectronics instead of Physics Education Research to appeal to a broader audience. PER can be incorporated into an optoelectronics program).
- c. Bard College, Cornell, RPI discussed as potential options beyond Fall 2016.

6. Outreach – Harold Hastings

a. The four faculty (Bruce White, Jenny Magnes, Carl Ventrice, and Harold Hastings) at the September 11 Executive Committee functioned as a Committee of the Whole for this cycle.

b. One application had been approved at the April Meeting.

Title: Oneonta Sparking New Attitudes in Physics (O-SNAP!)

Institution: SUNY Oneonta

Amount approved: \$ 1,943 + \$ 200 for travel to Spring 2016 NYSSAPS Meeting

Project Directors: Kimmy Cushman and Sunil Labroo

Summary: "We request \$2143 to support outreach activities by a team of physics and engineering students at SUNY Oneonta. A team will visit middle schools across Upstate New York. The project is designed to spark an interest in physics and engineering fields, especially among female and minority students. The "make and take" activities from our program are a powerful way to spark that interest because the students will show them to their parents, their friends etc. Moreover, having an all female team is a proven role model approach."

c. There were two applications for the present cycle:

Title: Bringing Physics to Harlem's Underprivileged Youth

Institution: CCNY

Amount requested: \$ 2,000

Title: Using Interactive Video Vignettes to teach K-12 Students about Careers in Physics

Amount requested: \$2,000

Institution: Rochester Institute of Technology

Project director: Geraldine L. Cochran

d. Action item: The committee recommends:

- i. **Approving the CCNY Proposal at the requested \$ 2,000, plus up to \$ 200 for travel to present. (also supported by Ken Podolak and Erica Simonson by email). Vote to be taken by email.**
- ii. **Contacting the RIT group, and proposing that they either resubmit with a budget of at most \$1,000 (plus up to \$ 200 for travel to present), no misc. or lunch costs, no pay for the student actors (RIT paid this for other videos), science-related "gifts" instead of gift cards – budget for equipment, supplies and expense, details about**

the church and details about subsequent broader outreach, by October 15 for a rapid review by the Committee or resubmit for the next cycle (deadline March 31, 2016) along these lines, except for a budget of up to \$ 2,000 for broader outreach.

e. **Action item:** We recommend posting the new application form on the website, with a link "instructions and applications", and posting a summary (to be supplied) of prior applications.

f. Scott Heinekamp will present the Outreach Grant program at the Fall 2015 meeting of STANYS (Science Teachers Association of New York State).

g. Membership of the Committee: Jenny Magnes and Carl Ventrice volunteered to serve on the Outreach Committee with Harold Hastings continuing to serve as Chair.

7. Election Committee: Carl Ventrice and Jenny Magnes volunteered to serve on the election committee for the 2017 elections. As Chair-elect, Erica Simoson will chair this committee. A representative of APS must still be selected.

The meeting was adjourned (12 pm).

Appendix A - Fall 2015 Student Poster Awards

Undergraduate Student Category:

1st Place: Mallory Morgan, Vassar College, \$300

2nd Place: Nicholas Vandruff, Maisha Zahed, Jooyeon Yang, Bard College at Simon's Rock, \$225

3rd Place: Bridget Chartrand, SUNY-Oneonta, \$100

Appendix B – Travel Support to Students to Attend the Fall 2015 Symposium at Vassar College

None Requested

Appendix C –Report of Spring 2015 Symposium at SUNY – Fredonia

SPRING 2015 112th Topical Symposium at State University of New York at Fredonia: "Quantum Computing and Communications" April 24-25, 2015

Registration:

APS members: 16

Non-APS members: 6

Retired/H.S. Teachers: 1

Students: 46

Speakers: 10

Total Attendance: 79

Banquet Attendance: 67

Income:

Registration: on site	\$130
Collected by APS	\$835
Banquet: on site	\$270
Collected by APS	\$895
SUNY Fredonia Contribution:	\$1063.72
NYSS-APS Contribution:	\$1276.41
Income Total:	<u>\$4470.13</u>

Expenses:

Printing/Folders/Badges:	\$120.68
Speaker travel expenses:	\$1749.84
Catering:	\$2599.61
Expenses Total:	<u>\$4470.13</u>

Other expenses:

Posters Awards: \$400 (see awardees below)

Student Travel Support:

Outreach Grant (SUNY Oneota): \$2143.00

Invited Speakers:

- Francisco Rouxinol – “Macroscopic Scale Elements in Quantum Information and Quantum Sensing Applications”
- Agata Branczyk - “Quantum states of light”
- Andrew Jordan – “The Quantum Road Most Taken”
- Xuedong Hu – “Relaxation of a Moving Spin Qubit”
- Graeme Smith – “Quantum Information Theory”
- Mohammad Mirhosseini: “Quantum communication with high-dimensional optical states.”
- Thomas Jennewein: “Photonic Quantum Entanglement for Technologies and Applications; Tools for the Quantum Internet”
- Joshua Combes – “Quantum measurements: new, better, easier”
- Chad Orzel (Banquet Speaker) – “What every dog should know about quantum physics”

Contributed Posters:

- *“Spectroscopy of High Angular Momentum Rydberg States of H₂”* Sarah Chamberlain and Dr. Erica Simoson, Department of Physics, SUNY Fredonia, Fredonia, New York 14063
- *“Plasmon Resonance Studies Of Gold Films”* Jeff Fetty, Risha Sheni, and Dr. Ken Podolak, SUNY Plattsburgh and Plattsburgh High School
- *“Effectiveness of Magnetic Ink Doped with Iron”* Cari Lewis, Jordan Flagg, and Dr. Ken Podolak SUNY Plattsburgh
- *“Effects of Copper Adsorption on Nickel with Respect to Ethanol Oxidation”* Edmund Li, Haani Qudsi, and Dr. Michael Walters SUNY Plattsburgh
- *“Hyperfine-mediated spin dynamics in the phosphorous donor”* Luke Pendo and Xuedong Hu University at Buffalo, The State University of New York
- *“Theoretical and numerical analysis of a quantum optical Nonlinear Sign-shift Gate”* Ryan Scott and Dr. Edwin Hach III Rochester Institute of Technology
- *“Phonon mediated spin relaxation in a moving quantum dot: Doppler shift, Cherenkov radiation, and spin relaxation boom”* Xinyu Zhao¹, Peihao Huang², and Xuedong Hu^{1, 1} Department of Physics, University at Buffalo, SUNY, Buffalo, New York 14260, USA and ² Department of Physics, California State University Northridge, Northridge, California 91330, USA

Poster Awards:

Undergraduate awardees:

- Sarah Chamberlain – State University of New York (\$100) *“Spectroscopy of High Angular Momentum Rydberg States of H₂”*
- Luke Pendo – University of Buffalo (\$100) *“Hyperfine-mediated spin dynamics in the phosphorous donor”*
- Ryan Scott – RIT (\$100) *“Theoretical and numerical analysis of a quantum optical Nonlinear Sign-shift Gate”*

Graduate student/Post-doc awardee:

- Xinyu Zhao – University at Buffalo – (\$50) *“Phonon mediated spin relaxation in a moving quantum dot: Doppler shift, Cherenkov radiation, and spin relaxation boom”*

Honorable Mention

- Edmund Li - SUNY Plattsburgh – (\$50) *“Effects of Copper Adsorption on Nickel with Respect to Ethanol Oxidation”*