

Minutes of the Executive Committee of the APS Forum on the History of Physics, Monday, April 2, 2012, 10:30 am -- 3:00 pm, Executive Conference Suite 226, Hyatt Regency Hotel, Atlanta, GA.

[Due to a Bylaws change approved by Council and FHP members, there is no longer an "Annual Business Meeting" of the FHP, hence no minutes of such a meeting are appended as found in past documents. At the end of this document is appended a report on the Unit Convocation.]

Present: Executive Committee (EC) members Martin Blume (Chair), Peter Pesic (Chair Elect), Don Howard (Vice Chair), Thomas Miller (Secretary-Treasurer), Daniel Kleppner (Past Chair), Michael Riordan (Forum Councilor), Robert Crease (Newsletter Editor, Webmaster, and Member At-Large), Gregory Good [AIP Center for History of Physics (CHP) representative], At-Large members Paul Cadden-Zimansky, Cathryn Carson, and Clayton Gearhart. **Also attending:** Brian Schwartz (Vice Chair Elect) and Joe Anderson (Niels Bohr Library & Archives -- NBLA). **Drop-in Guests:** Kate Kirby (APS Executive Officer) and Bob Byer (APS President). **Absent:** At-Large member Elizabeth Garber.

1. Welcome, Introductions, and 2011 Minutes. Blume opened the meeting and asked attendees to introduce themselves. Miller noted that the 2011 Minutes were approved by e-mail last May and are posted online at <http://www.aps.org/units/fhp/governance/minutes/index.cfm> .

2. Budget and Fundraising. Miller reported on 2011 expenses and details of APS funding of FHP. The prospects for 2012 are similar except that more speaker expenses are expected. See **Attachment 1** for details on these and other issues, including the FHP membership count and the election results. Kleppner gave a report on the new FHP Heritage Fund to support invited speakers and video recording of invited sessions. The fundraising committee consists of Kleppner, Blume, and Gloria Lubkin (co-chairs), Virginia Trimble, Michael Riordan, Neal Lane, and David Cassidy (members). Approaches have been made to one organization, and further guidance is expected from APS Director of Development, Darlene Logan. Westfall mentioned that the father of a deceased FHP EC member is looking for ways of memorializing his daughter. It was thought that he might be interested in sponsoring invited talks or student travel grants for contributed papers. Several persons commented that the student grants could be better publicized, e.g., through CHP and the History of Science Society.



3. Visit by Kate Kirby (APS Executive Officer) and Bob Byer (APS President). Kirby and Byer reported on the APS Strategic Plan that has been completed. Byer described the process, and Kirby the details. The idea was to determine how better to serve APS members, the physics community, and society in general, and to achieve the requisite organizational excellence. Kirby emphasized the need of APS to look more like US demographics, to help early-career physicists, to integrate with industrial physicists (which would help physics students), to engage with international physicists, and to face the challenge of communicating effectively with the public, APS members, and Congress. Social media methods are already being used. Kirby said that partnering with AIP, SPS, AAPT, and others is desired, and gave the example of the American Chemical Society adopting the APS/AAPT PhysTEC program. Looking inward, APS needs to deal with financial security and development. The Strategic Plan will be posted online later in April.

Crease told Kirby and Byer that the template for unit websites was very restrictive and not particularly attractive. Kirby responded that the media people are looking into improvements and would welcome input from FHP.

4. Initiatives and Outreach. Howard and Crease recommend that relationships between FHP and other physics history outlets be developed, e.g., CHP, NBLA, the History of Science Society, and journals. *Annalen der Physik* and *European Physical Journal* publish history articles. Why not APS and AIP journals? *Physics Today* and *APS News* have history articles. Could FHP recommend articles for *Physics in Perspective* and *Physics Today*? Could editors and organizational leaders recommend invited speakers for FHP? Good noted that finding the right journal is always a problem – would historians want to be in a pure physics journal like *Physical Review*, to reach a certain audience? Howard will discuss with Pesic and Blume about approaching publishers and other organizations regarding a relationship with FHP. Anderson said that since the next March meeting is in Baltimore, FHP people could schedule a visit to NBLA in College Park.

Schwartz recommended that FHP develop a list of history speakers and topics upon which physics department colloquia could draw.

4. Forum Councilor Report. Riordan briefly reviewed his report of the November APS Council meeting that had been circulated by e-mail, then discussed items that had come up at the March 30 meeting three days earlier. See **Attachment 2**. Executive Board members were elected, and Riordan was named to the Committee on Committees. The Ridge publishing building expansion will proceed following an attempt by environmentalists to stop it, but it will cost \$2M more as a result. Half will be paid from the APS endowment, and half amortized over 40 years. Riordan is worried about looming deficits in the APS operations that do not seem to be adequately addressed in the new Strategic Plan. He also perceives that Council has become risk-averse as a result of the word-smithing criticism of the climate statement.

5. Video and Audio Recording of Invited Sessions. Kleppner said that video recording of invited sessions such as the Purcell and Rossi ones, where the speakers were those who had direct contact with Purcell and Rossi, is an important historical tool in addition to allowing anyone to view the talks online. He told of the effort in having those two sessions recorded and

raising the money for the job (\$1,500 each) and of a problem with one of them, losing audio from Bloembergen's talk. He feels that someone (probably an EC member) needs to be responsible for arranging routine audio and video recording. Crease noted a positive experience using a graduate student to video record a talk. Perhaps FHP could purchase a camera and sound equipment. Schwartz suggested recruiting local graduate students at meeting sites for the job. Pesic agreed to see that something gets done on this item.

6. Formation of Editorial Board and Nominating Committee for 2012. Miller said that the new bylaws provide for an Editorial Board consisting of three or more FHP members appointed by the FHP Chair for terms of one to three years, and one of these persons will be named Chair of the Editorial Board. Miller will work with Pesic to get the Editorial Board set up with staggered terms.

Riordan offered to serve on the Editorial Board. The Nominating Committee will be chaired by Marty Blume, who will make suggestions to Pesic for potential members, and to APS (via Alan Chodos) for an APS representative on the committee. The Nominating Committee must find candidates for the chair line, two at-large EC members, and a Secretary-Treasurer (who may run unopposed).



7. Report of the Program Committee. Pesic reported on the 2012 sessions (see **Attachment 3**). As an outreach activity, APS allowed persons attending forum sessions to pick up “forum only” stickers at the Information Booth. This permitted students and others who were not involved in the scientific sessions to attend FHP sessions without registering for the entire meeting. The March meeting had FHP sessions on Maxwell's Equations, Ed Purcell, and Metrology. One speaker, Terry Quinn, was supported by a Beller Lectureship through the APS Office of International Affairs. The April meeting had FHP sessions on Bruno Rossi, National Security, and National Laboratories, in addition to a very successful contributed session (which included a talk by a student with support from FHP). Howard talked about ideas for 2013, including pairing with others: a Kavli session, the 100th anniversary of the Bohr atom, and a history of accelerators globally. Howard will look into sessions involving other entities (AIP, CHP, NBLA, the Einstein Papers project, etc.). The 50th anniversary of the Penzias and Wilson cosmic microwave background detection experiment is nearing. A session on the *history* of the

relation between science and religion was suggested, with reference to Krauss's book, *A Universe from Nothing*. Perhaps controversial, but will attract attention. Crease referred to David Lindley's book, *Einstein, Heisenberg, Bohr, and the Struggle for the Soul of Science*. Schwartz suggested staging a reading of a play on the history of physics, and mentioned the success of events at CUNY with *Copenhagen* and *Doctor Atomic*. Howard mentioned Baxter's play, *Let Newton Be*. David Cassidy was reported to be working on a play on the Farm Hall conversations.

8. Oral History Workshops. Cadden-Zimansky reported on the workshops to train graduate students in conducting oral history interviews, which would be deposited with NBLA. See **Attachment 4**. He said that 6-7 students participated in each of the March and April meeting workshops. Since the e-mail invitations had been sent to all FHP members, there also turned out to be interest from older FHP members. Attachment 4 ends with a number of recommendations, here briefly stated: (1) continue workshops in 2013, including the post-workshop dinners; (2) advertise more widely and open the workshops to all APS members; and (3) consider travel grants for those graduate students who need it. A suggestion was made that we especially make sure that the workshops are known to graduate students local to the meeting site.

9. Newsletter Editor/Webmaster Report. Crease (now Newsletter Editor and Webmaster) reported on the status of the integration of the FHP Newsletter with the FHP website. The editor needs a deputy. As a matter of new business, Riordan made a motion, which was seconded and passed unanimously, "Crease is authorized to name a deputy editor, with duties to be worked out between the editor and deputy, and FHP will provide travel support for the deputy to attend one of the APS annual meetings to report on our sessions."

10. Presentation of Certificates of Appreciation. Blume presented certificates to outgoing EC members Dan Kleppner, Paul Cadden-Zimansky, Cathryn Carson, and Webmaster George Zimmerman.

11. Adjournment. The meeting was adjourned shortly after 3 pm.

Attachment 1

Secretary-Treasurer Report, April 2012 (Tom Miller)

1. Membership. As of January 2012, FHP had 3708 members, 7.4% of APS, a percentage that slowly declines each year. (Last year at this time: 3744 FHP members, 7.8% of APS.) A breakdown will be given for each type of membership: Regular 1501; Life 347; Senior (retired) 675; Junior (postdoc) 126; and Student 1059. FHP has a total of 604 Fellows. The gender breakdown is Male 3151; Female 361; and None 196.

2. Election. In the annual election, 547 people voted online, and I received 27 paper ballots, for a total of 574 voters. Our membership as of January 2012 was 3708, so 15.5% voted in the election. Last year: 17.5%. Upon the close of the April APS meeting, the Vice-Chair will be Brian Schwartz (City University of New York), and the new at-large members of the Executive Committee (three-year terms) will be Lisa Crystal (Harvard) and Paul Halpern (University of the

Sciences). In addition, the new Bylaws passed this final step of approval. The new Bylaws are posted online at <http://www.aps.org/units/fhp/governance/bylaws.cfm> . Marty Blume verified the online results; the paper ballots would not have changed the outcome, and in any case, mirrored the online voting, as usual.

3. Treasury. FHP has maintained a baseline bank balance of at least \$15,000 as insurance against colossal disasters or mistakes. Income each year consists of an allocation from the APS every January, investment interest on our monthly bank balance, a share of March and April meeting income depending on the level of FHP participation, and donations (usually earmarked for specific purposes such as named lectures, student travel grants, or the Endowment Fund). Expenses are mainly travel to EC meetings and sorters meetings and stipends to assist invited speakers with travel expenses. The FHP bank balance is higher than ever this year (\$58,284 as of January 1, 2012) because the paper newsletter was dropped two years ago. The intention has been to use income for speaker expenses (or whatever projects the EC chooses to do with the money). As it turns out, we had generous donations for speaker expenses. The regular accounts (i.e., not counting the endowment funds or donations) showed the following in 2011:

Income:

FHP share of APS dues, \$20,000.

FHP share of March meeting, \$1,556.

FHP share of April meeting, \$933.

Interest on accounts, \$1,263.

TOTAL INCOME: \$23,752 (\$4,387 higher than last year; 1st 3 figures are all higher).

Expenses:

Newsletter printing & mailing, \$0.

EC meeting travel, \$9,458.

March meeting travel, \$1,716.

Sorters or program meeting travel, \$576.

EC lunch, \$1,038.

Invited speaker expenses (2), \$851.

Student Travel Grant, \$600.

Conference calls, FedEx, \$228.

Audio/Visual, \$150.

Sign at meeting, \$20.

TOTAL EXPENSES: \$14,637.

Last year, the total expenses line read \$10,421. The difference is mainly lower travel expenses last year, due to variable sources and site dependence.

In addition to the regular FHP account tabulated above, FHP has an endowment fund initiated by a \$10,718 donation from Harry Lustig, a \$14,000 donation from Virginia Trimble, and other funding from Marty Blume, Chun Lin, and Dan Kleppner, for a total endowment of \$34,218. The interest from the endowment stands at \$4,781 and is available for speaker support. The interest rate on the endowment is higher than on regular accounts.

Budget for 2012. The 2012 income and expenses will be much the same as in 2011, except that invited speaker travel will be higher. EC and speaker expenses are difficult to estimate, but an educated guess is that EC travel (EC meeting, sorters meetings, etc.) will total \$14,000, and speaker travel will total \$8,000. With the other income and expense figures about the same, expenses will equal income within a few hundred dollars. (This does not count the endowment or the interest it generates, which we have yet to make use of.)

We gave out one student travel grant to Hamilton Carter in 2011 (for the April 2012 meeting). The student must be presenting a paper in an FHP session, which isn't common. We should remember to urge FHP professors to make known the possibility of FHP student travel support well in advance of the abstract deadlines, to drum up involvement by students.

APS funding of forums. Because of the very different sources of income and needs of different forums, APS has begun giving money *only* to forums that have less than \$50,000 in the bank on January 1 of the year. Those forums get \$20,000 on January 1, and others get none, though special requests are entertained. FHP ended 2011 with \$38,164 in regular accounts (i.e., not counting the endowment), so FHP received \$20,000 on January 1, 2012. Our planned 2012 expenses will keep us below the \$50,000 threshold, but it's something that must be monitored as autumn rolls around.

Attachment 2

Forum Councilor Report (Michael Riordan)

Other than the elections of officers, there was little to report from the 13 November 2011 APS Council meeting in Salt Lake City. From among the Council members, Marjorie Corcoran, Neil Cornish, Wick Haxton and Herman Winick were elected to serve two-year terms on the APS Executive Board, while John Galayda was elected to the Audit Committee, and Marjorie Corcoran and Yours Truly were elected to serve on the Committee on Committees. Another significant election was that of Robert Jaffe of MIT to serve as Vice Chair of the Panel on Public Affairs, in the line to become Chair in two years.

Acting on behalf of APS President Barry Barish, who departed the meeting early, President-Elect Robert Byers reported that the lawsuit brought against the APS Ridge expansion by the Pine Barrens Society had been dismissed in court. Construction would begin in early 2012, with approximately \$1 million in cost overruns due to the project delay.

Council unanimously approved the proposed APS Bylaws Amendment Article XVI governing procedures to be followed in formulating APS Policy Statements. This amendment is a reaction to the "wordsmithing" by Council of a recent APS Policy Statement on climate change.

Council also unanimously approved the proposed Bylaws of the new APS Forum on Engaging the Public, as well as proposed amendments to the Bylaws of the Forum on International Physics, the Bylaws of the Topical Group on Magnetism, the Bylaws of the Topical Group on the Physics of Climate, and the Bylaws of the Forum on Education.

The spring 2012 Council Meeting was held on 29 March 2012 at the Hyatt Regency Hotel in Atlanta, Georgia. The following report was first made verbally at the subsequent FHP

Executive Committee meeting on 2 April 2012.

Due to project delays and other unforeseen items, the total estimated cost of the APS Ridge Expansion Project has increased by about \$2 million — not the \$1 million projected in November 2011 — from \$14.6 million to \$16.6 million, or about 14 percent. That also represents a \$4 million, or 33 percent, increase over the \$10.6 million projected in January 2009 when the APS Executive Board decided to embark on this project rather than pursue other ways to add needed office space.

Since 2005 APS revenue has been basically flat at \$44 million despite 10–25 percent increases in the prices of its online journals — which now represent about three fourths of its subscription income. Meanwhile APS expenses have increased by almost \$4 million to \$46 million, with the increases coming mainly in education, outreach and public affairs. These deficits are putting an undue burden on the APS publications arm, which accounts for roughly three fourths of total APS income. The Society is getting stretched thin financially. This trend will only worsen in the near future as the Ridge Expansion begins, adding another \$300,000 to its expenses and subtracting a similar amount from its investment income annually.

Despite these looming problems, Council unanimously approved the added \$2 million cost increase on the Ridge Expansion Project and the 2013 APS budget, which has a projected deficit of \$3.7 million — to be covered by investment income from the APS endowment (of about \$100 million). Yours Truly was the only Council member to demur on a motion to increase online journal prices by 2 to 7 percent in 2013 (depending on the library “tier” structure), abstaining on this issue.

On behalf of the APS Executive Board, Kate Kirby presented a draft five-year strategic plan for 2013–2017 that set forth admirable but ambitious goals for the Society, but was vague about how we are going to deal with the growing deficits — especially in light of the looming challenges facing the APS publications arm from the growth of open-access publishing. There were only two brief statements at the very end of this document about the need to “develop new revenue streams and maintain a robust business model for publications” and to “build a comprehensive development strategy,” but it offered no details about how to pursue these goals.

Despite its fiduciary responsibility regarding the APS finances, Council has yet to address in a meaningful way what I see as looming and possibly intractable problems in this area.

— Respectfully submitted, Michael Riordan

Attachment 3

Report of the FHP Program Committee for 2011-2012

The FHP Program Committee enjoyed organizing what we hope have been interesting sessions for the APS meetings in Boston (February 27-March 1) and Atlanta (March 31- April 2).

In the March session, we decided to honor the 150th anniversary of Maxwell’s formulation of his equations for electromagnetism by assembling three eminent authorities (Francis Everitt, Bruce Hunt, and Jed Buchwald) to speak about the discovery, propagation, and application of these equations; all three of these talks were really excellent, presented with insight and verve. Following them, two Nobel laureates, Roy Glauber and Frank Wilczek, reflected on Maxwell’s

equations from our present point of view. We would like to thank Paul Cadden-Zimansky for the original suggestion that brought this session into being.

This year marks the centenary of Edward Purcell, whose seminal work brought NMR into the world and transformed radio astronomy, among other signal accomplishments as teacher and researcher. To consider his scientific legacy, we heard several of his closest collaborators speak about the discovery of NMR (Nicolaas Bloembergen), Purcell's work in biology (Howard Berg), his contributions to radioastronomy (Harold Ewen, who, though unable to attend for personal reasons, was present through his written text, read by Gerald Holton), his involvement advising the government (Richard Garwin), and (very much not least) his immense influence as a teacher (John Rigden).

Finally, we had a session on the history of metrology, with the new developments in the SI at the forefront, addressed by five eminently qualified speakers. Robert Crease, who organized this session, began with the history of the quest for absolute standards, followed by Terry Quinn (on the early years of the International Bureau of Weights and Measures), James E. Faller (on measurements of g and G), Howard P. Layer, Sr. (frequency measurements of visible light at NBS/NIST), and Richard Steiner (on Planck's constant measurements and SI kilogram standard). We thank Bob Crease for his initiative in organizing and speaking at this session.

At the April meeting, we held a session on Bruno Rossi, the great cosmic ray physicist, and his legacy, organized by Dan Kleppner. Three notable speakers addressed Rossi's influence on x-ray astronomy (George W. Clark), space physics (Edward Stone), and cosmic rays (James W. Cronin).

A second session considered the history and implications of physicists involved in advising on national security, organized by Gloria Lubkin. Once again, the speakers brought extensive experience to this important topic. Richard Garwin addressed PSAC (the President's Science Advisory Committee) and other modes of advice; Roy Schwitters addressed the perspective of those involved in JASON, and former Director of Defense Research and Engineering at the Pentagon, John S. Foster, Jr., spoke on advisory experience with DOD, DOE, and the intelligence community.

The final session will concern developments in the national laboratories since 1980, organized by Catherine Westfall. We are especially pleased that this session will begin with Lillian Hoddeson, this year's Pais Prize winner, giving her Pais Prize talk on the failure of the SSC and its historical lessons. Then, Burton Richter will give his view of the evolution of relations between the national laboratories and the DOE. Finally, Joseph Martin will discuss the assimilation of solid state physics into the national laboratories.

We hope that these sessions were valuable and interesting occasions for the audience; the gathering of these very special speakers may give us several unique occasions that probably will never happen again. Such opportunities to hear about the history of physics from some of its most important protagonists are history itself. We thank those who spoke, those who kindly agreed to chair the sessions (listed below), and our colleagues on the committee, for their thoughtful advice and enthusiasm.

Peter Pesic
Co-Chair, FHP Program Committee 2011-2012

March 2012 FHP Sessions
(Boston Convention Center, Boston, MA)

I. One Hundred Fifty Years of Maxwell's Equations

(organized by Peter Pesic)

Session B-19

Monday, February 27, 2012 from 11:15-2:30

Room: 253AB

C. W. Francis Everitt (Stanford), "The discovery of Maxwell's equations"

Bruce Hunt (Univ. of Texas), "The Maxwellians and the Remaking of Maxwell's Equations"

Jed Buchwald (Caltech), "Using Maxwell's equations in the late 1800s"

Roy Glauber (Harvard), "Maxwell's equations and quantum optics"

Frank Wilczek (MIT), "Taking off from Maxwell's equations "

chair: Edward Gerjuoy (University of Pittsburgh)

How Maxwell discovered his equations, how they affected the physics of his time and our own, including current perspectives on this seminal discovery.

II. The Scientific Legacy of Edward Purcell (1912-2012)

(organized by Peter Pesic)

Session Q-19

Wednesday February 29, 2012 from 11:15-2:30

Room: 253AB

Nicolaas Bloembergen (Univ. of Arizona), "Purcell and NMR"

Howard Berg (Harvard), "On small things in water moving around: Purcell's contributions to biology"

Harold I. Ewen (EK Associates), "Purcell and the development of radioastronomy"

Richard Garwin (IBM Watson Research Center), "Purcell's work advising the government"

John Rigden (Washington Univ.), "Purcell the Teacher: In and Out of the Classroom"

chair: Gerald Holton (Harvard)

The historical context and continuing importance of the discoveries of Edward Purcell (1912-1997), including NMR, its application to radioastronomy, his work in biological physics, in advising the government, and in physics education.

III. History of Metrology: The Evolution from Physical to Electronic Measurements

co-sponsors: FHP and GPMFC
(organized by Robert P. Crease)
Session X-2
Thursday, March 1, 2012 from 2:30-5:30
Room: 204AB

Robert P. Crease (Stony Brook), "Dreams of a Final System: Origins of the Quest for an Absolute Standard."
Terry Quinn (Emeritus Director BIPM, Beller Lecturer), "From Artifacts to Atoms: The Origins and Early Years of the International Bureau of Weights and Measures"
James E. Faller (JILA), "Measurement of the gravitational quantities g and G : Learning how ideas for precision measurement experiments come about"
Howard P. Layer, Sr. (NIST), "The Odyssey of the Frequency Measurements of Visible Light at NBS/NIST"
Richard Steiner (NIST), "Evolving Planck Constant Measurements into the SI Kilogram Standard"

chair: Richard Davis (BIPM)

The history of measurement standards from individual manufactured artifacts to standards based on constants of nature.

April 2012 FHP Sessions (Hyatt Regency, Atlanta, GA)

I. The Scientific Legacy of Bruno Rossi

(organized by Daniel Kleppner)
Session C5
Saturday, March 31, 2012 at 1:30-3:18
Room: International Ballroom South

George W. Clark (MIT), "Rossi and x-ray astronomy"
Edward Stone (Caltech), "Rossi and space physics"
James W. Cronin (Univ. of Chicago), "Rossi and cosmic rays"

chair: Daniel Kleppner (MIT)

The session was intended to portray the science that Rossi helped to pioneer in X-ray astronomy, cosmic ray physics and space science. The spirit of the session was to help the younger generation understand more about the heritage of physics that makes their research possible and to learn something about the great scientists who helped to create that heritage.

II. Physicists Advising on National Security

(organized by Gloria Lubkin)
Session H5
Sunday, April 1, 2012 at 10:45-12:33

Room: International Ballroom South

Richard Garwin (T. J. Watson Research Center, IBM Fellow Emeritus), "Experience with the President's Science Advisory Committee, Its Panels, and Other Modes of Advice"

Roy Schwitters (University of Texas, Austin), "Experiences Advising our Government from the Point of View of a JASON"

John S. Foster, Jr. (Private consultant), "Advisory Experience with DOD, DOE, and the Intelligence Community"

chair: Marty Blume (BNL), filling in for Gloria Lubkin (Physics Today editor emerita), who was unable to attend following an accident.

The session was intended to present the perspectives of three physicists who have spent many years advising the government on national security.

III. Contributed Session on History of Physics and Educational Topics

(arranged by Gloria Lubkin)

Session J15

Sunday, April 1, 2012 at 1:30-3:18

Room: Grand Hall East D

Kenneth Brecher (Boston University), "On the Late Invention of the Gyroscope."

Felix T. Smith (SRI International), "Sommerfeld's balancing act with Einstein: The geometry of relativistic velocity space."

Cameron Reed (Alma College), "Francis Perrin's 1939 Analysis of Uranium Criticality."

Hamilton Carter (New Mexico State Univ.), "Babson Bahnsen, the DeWitts and the General Relativity Renaissance."

Ronald E. Mickens (Clark Atlanta Univ.), "Who was Christine Shack?"

John Laubenstein (Northern Illinois Univ., alumni), "Black Holes: are they as real as we think?"

Robert Steiner (American Museum of Natural History), "Online and Blended Climate Change Courses for Secondary School Educators from the American Museum of Natural History."

Saami J. Shaibani (Instruction Methods, Academics & Advanced Scholarship), "Learning Physics from the Real World by Direct Observation."

Gene McClellan (no affiliation), "Teaching the Maxwell and Dirac Equations in the Same Algebra."

chair: Adrienne Kolb (Fermi National Accelerator Laboratory)

IV. The National Laboratories After 1980 (Pais Prize Session)

(organized by Catherine Westfall)

Session T5

Monday, April 2, 2012 at 3:30-5:18

Room: International Ballroom South

Lillian Hoddeson (Univ. of Illinois, Urbana), "The Failure of the SSC: Lessons for the History of Physics" (Pais Prize talk)

Burton Richter (SLAC), "A View of the Evolution of Lab/DOE Relations."

Joseph Martin (Univ. of Minnesota, Minneapolis), "A Good Name and Great Riches: Rebranding Solid State Physics for National Laboratories"

chair: Catherine Westfall (Lyman Briggs College, Michigan State University)

This session will describe the various changes that took place within the national laboratories and between the national laboratories and the overall physics community and the Department of Energy.

Attachment 4

Oral History Workshop Report (Paul Cadden-Zimansky)

This year the FHP organized Oral History Workshops at the March and April Meetings aimed primarily at graduate student FHP members interested in recording interviews with established physicists and having these interviews preserved in the AIP's Niels Bohr Library.

The central unknown in organizing the workshops was how many individuals would be both interested in attending them and present at the annual meetings. The aim for this first run of workshops was to have 8 to 10 participants at each meeting, erring on the smaller side. To this end an email invitation was sent out addressed to the approximately 1,000 graduate student FHP members (despite a request to the APS to limit this email to student members, it went out to all FHP members), but no advertising was placed in the annual meeting bulletins or announcements. The response to the invitation was on the small side, with 3 RSVPs each for the March and April meetings. To generate additional interest at the March meeting flyers were posted and announcements at FHP sessions were made.

The March workshop, conducted by Greg Good, had 6 attendees and was well-received by the participants. The workshop was followed by an FHP-funded dinner with a few of the attendees where more informal discussions and questions helped the graduate student participants outline potential oral history candidates and projects. A concrete example of a potential project was one advanced by an Iranian graduate student interested in interviewing Iranian physicists both in the U.S. and Iran who came of age around the time of the Islamic Revolution.

The April workshop, which will be conducted by Catherine Westfall, will take place the Saturday before the EC meeting.

Based on the experience of the first workshop, the following recommendations are made to the EC:

1. Provided individuals capable of running a workshop are available, to hold workshops at the 2013 annual meetings. Incoming EC member Lisa Crystal, who attended the March workshop, has volunteered to organize the 2013 workshops.
2. Open up the workshops to all APS members and advertise them more extensively in the conference proceedings and announcements as well as to historians of physics.
3. Continue to have post-workshop dinners restricted to a few graduate student members.

4. Several potential graduate student attendees inquired about the possibility of travel support to attend a workshop. Given that the funds for students giving talks at FHP sessions has been underused in recent years, it may be advisable to open up these funds to student workshop attendees provided they submit an extensive description of their potential oral history research project.

The Unit Convocation was held a couple of weeks after the EC meeting:

Report on the APS Unit Convocation, April 20-21, 2012

Each spring the APS hosts a gathering of unit officers. This year FHP was represented by the Vice-Chair Brian Schwartz and Secretary-Treasurer Tom Miller. The Convocation allows unit officers to meet with APS staff and each other.

We were welcomed by APS Executive Officer Kate Kirby and President Bob Byer, then were given talks by Kate, Treasurer/Publisher Joe Serene, and Editor-in-Chief Gene Sprouse. Then we attended breakout sessions on International Affairs, Education, Public Affairs, and Outreach. Following this, the forum officers met to discuss common issues. See the photo. After lunch, the staff of different departments came in to tell what they do and to listen to comments: Information Technology, Meeting Support, Careers and Membership, Special Publications and Media, and Finance and Development.



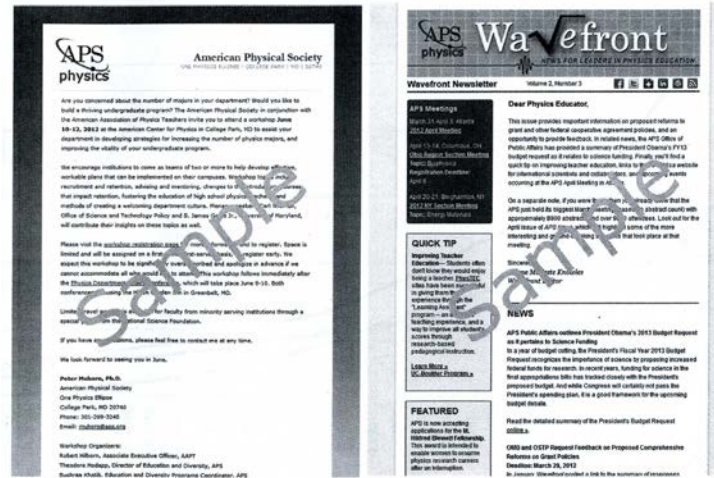
Here are some random points that came out of meetings with APS staff.

1. FHP is allowed to transfer funds from the main account to an endowment or prize fund (a “board transfer”).
2. APS is planning on 21 invited sessions for March 2013 and 17 for April 2013. FHP has been allotted 3 invited sessions at each meeting. Prize sessions must be incorporated into the allotments. *However*, there are two new units (Forum on Outreach and Engaging the Public, and Topical Group on Physics of Climate), and unless Council votes for additional invited sessions, sessions for FOEP and GPC will have to be carved out of present allotments to other units.
3. Terri Gaier (Meetings) said that some meeting sites are more successful than others – for example, people liked Boston but didn’t like the spread-out configuration in Dallas. APS is leaning toward alternating between two fixed meeting sites, one west coast, one east coast. There’s a tentative plan for the 2019 March and April meetings to be held at the same site

because it will be the 120th anniversary of APS. She also noted that there were 416 FHP members registered for the March 2012 meeting (out of 9841 total, 4.2%) and 174 for the April 2012 meeting (out of 1360 total, 12.8%).

4. The APS IT people can now send out HTML e-mails to members (previously text only), so we can send more attractive messages to members. The picture below is from their handout. Contact Chelsea Pedé (pede@aps.org) for help designing a message.

Officers in other forums felt that members should receive at least one e-mail per month from the unit to avoid “falling off the map”, but probably no more than a couple per month. One unit officer said that messages must fit onto his cell phone screen if he’s going to read it.



5. 16,000 APS members (out of >50,000 total) do not belong to any unit of APS even though belonging to 2 units doesn’t cost anything.

6. FIAP just published their first online newsletter. They were startled to learn that it got only 36 hits from 6,000 members. They asked how other units get people to read their online newsletters.

7. Kelly Johnson can print certificates of appreciation for units. His example was nice, including a gold seal. It wasn’t as nice as the ones given out by Blume and Kleppner, but was much nicer than any FHP certificates from previous years. That group can also do layouts for newsletters and websites.

8. There is a list of available industrial speakers which includes videos, so that one can get an idea of the speaker’s effectiveness.

9. Amy Flatten handed out flyers on the International Affairs programs, including the Beller/Marshak lectureships. She said that these are underutilized; there was only one application for the Marshak program. As last year, she said that she is aware that having the deadline for Beller/Marshak after the program meetings makes it impossible for a unit to invite a speaker earlier in the year unless they already have money in hand. Flyers were also given out on cooperative programs with Brazil and India that offer travel support for lecturers going to or from universities or institutions. The Committee on International Scientific Affairs works with units. Council will be expanding its international representation from one to four members in the next four years, and they would like to have nominations.

The Convocation ended with a presentation on the Strategic Plan by Kate Kirby and Bob Byer. On Saturday, unit officers who were still present met with the Council's Executive Board for a half day about the Strategic Plan. The various units will be instrumental in carrying out the Strategic Plan, but it's a bit early to say exactly what will be expected of FHP. The Strategic Plan has been posted on the APS website at:



<http://www.aps.org/about/strategicplan/>.