

Minutes of the Executive Committee Meeting of the APS Forum on the History of Physics, Sunday, May 3, 2009, 12:30 PM – 5:30 PM, Directors Row F, Sheraton Denver Downtown Hotel.

(The minutes of the annual Business Meeting of the FHP are at the end of this report.)

Present: Executive Committee (EC) members David Cassidy (Chair), Gloria Lubkin (Chair Elect), Daniel Kleppner (Vice Chair), Thomas Miller (Secretary-Treasurer), Roger Stuewer (Forum Councilor), Members-at-Large Robert Arns, Francis Everitt, Gordon Kane, Paul Halpern, Peter Pesic, George Zimmerman; Michael Riordan (Newsletter Editor), Gregory Good (AIP Center for History of Physics, CHP). **Also attending:** Martin Blume (Vice Chair Elect), Ed Neuenschwander (Newsletter Associate Editor), Joe Anderson (AIP Niels Bohr Library & Archives, NBLA), and Judy Franz (APS Executive Officer).

The agenda sent to members in advance of the meeting will not be given separately because the items in the minutes are the same, and numbered the same as in that agenda.

- 1. Welcome and Introductions** (Cassidy).
- 2. Reminder that the Spring 2008 EC minutes were approved** by e-mail a month after that meeting and are posted on the FHP website (Cassidy).
- 3. Newsletter Editor's Report.** Riordan is stepping down as Editor but will remain as Chair of the Editorial Board and Publications Committee for at least until the end of the calendar year, and will serve as Associate Editor until a new Associate Editor can be found. Neuenschwander is the new Newsletter Editor. Riordan described the Spring 2009 experiment with an online-only newsletter, to combat the rising mailing costs of a paper newsletter. See **Attachment 1**, which contains details and statistics on viewing of the sections of the online Newsletter. Riordan printed and mailed copies to all those who requested one, and to history libraries. He received a few complaints about not having a paper newsletter. Riordan and Neuenschwander will probably have a paper version of the Fall 2009 Newsletter (possibly a condensed version of the online one), but are still gathering information on costs and **would like for the EC to set a specific limit on the newsletter expense** that they would then work within.
- 4. Secretary-Treasurer Report.** Miller reported on results of the recent election and the voting statistics, membership figures, income and expenses for 2008 (with a net loss of \$2,019), budget projections for 2009, bylaws modifications, items from past EC minutes, and intention to send some older records to NBLA. See **Attachment 2** for details.
- 5. Nominations for the Forum Councilor (FC) position.** Miller handed out e-mails from members containing FC nominations in response to his solicitation. No additional names were suggested. The persons mentioned, Stuewer and Riordan, were asked to

leave the room. Discussion followed. **A motion was made, seconded, and passed unanimously to hold an election between Stuewer and Riordan for the FC position.**

6. Budget Priorities. Miller reported that the 2009 budget is very uncertain because of the ongoing efforts to control the newsletter mailing costs, funding for invited speakers, and lack of major donations this year. The bottom line is that the EC needs to be aware that FHP will have to forego expenses that seem desirable and justifiable, and set priorities.

7. Joint Initiatives for FHP and CHP. Kleppner and Good described their discussions on ways that FHP and CHP can interact in a mutually beneficial manner. Funding could be raised for joint sponsorship of sessions at APS meetings, for example. These discussions are ongoing, and the outcome may have to await the new APS Executive Officer. The EC will be kept informed.

8. Joint Initiatives with NBLA on Department and Laboratory Histories.

Zimmerman, Arns, and Anderson reported on progress in getting institutions to deposit histories with the NBLA. NBLA has been able to identify ~1000 institutional histories already in their collections. See **Attachment 3** for further information.

9. APS Executive Officer. Franz joined the meeting to answer questions. She said that the FHP could hold its annual “Regular Meeting” required by the bylaws either at the February or March 2010 APS meetings. (Note that the APS Constitution, Article VIII(4), states that the time and place of the FHP “Regular Meeting” requires approval of the Executive Officer.) Franz agreed to help obtain information on specific newsletter costs, and commented that very few units still have paper newsletters. Cassidy presented Franz with a Certificate of Appreciation for her support of FHP.

10. Program Committee Report. Lubkin and Kleppner reported on the successful sessions arranged for 2009. The Landau session was especially gratifying. One lesson from this and the Wheeler and Anderson sessions is that intellectual heroes make for a successful history session. A session on the history of Silicon Valley was also successful. See **Attachment 4** for a list of sessions and speakers. Lubkin mentioned that Jim Cronin is interested in organizing a session on Fermi and, in the context of the proposed session on using history for teaching physics, that Marvin Goldberger was likely to be a good speaker at a Fermi session. Stuewer pointed out that since the February 2010 meeting was with AAPT, a joint session “Enriching Physics in the Classroom and Beyond” is hoped for, with Goldberger involved. Lubkin asked EC members to send areas of interest for 2010. Kleppner mentioned that he is going to a meeting of the Canadian Association of Physicists (in Moncton) where he’ll meet with his Canadian counterpart, Walter Davidson.

11. Next Regular Meeting of FHP. Since the “April” 2010 meeting will be held in February (in Washington, DC), a discussion was held as to whether to hold the “Regular Meeting” of the FHP at that time or at the “March” 2010 meeting. If in February, some EC members will have shorter terms in office, and some longer terms the following year.

The short year also requires that the annual election be moved up, possibly in late 2009. A straw poll was taken, with 6 persons favoring February, none favoring March, and 4 no preference. **A motion was made and seconded and passed unanimously to hold the 2010 Regular Meeting of the FHP at the Washington, DC, site in February.**

12. Forum Councilor Report. Stuewer reviewed APS Council actions taken only a few days earlier. See **Attachment 5.**

13. Unit Convocation. Cassidy reported on the APS Unit Convocation held on February 28, 2009, at APS-College Park, and attended by Cassidy, Lubkin, and Kleppner. See **Attachment 6.**

14. Fellowship Committee. Kleppner reported on actions taken on Fellowship nominations in 2008, and Blume reported on plans for 2009. The deadline for nominations in 2009 was extended until June 1 to make sure that nominations known to be in the works got submitted.

15. Webmaster Report. Zimmerman reported on the audio and PowerPoint presentations that had been posted on the FHP website, along with photos he has taken at meetings, and the positive feedback he has gotten about the postings. He said that all presenters seemed pleased to have their presentations online. He discussed the problem of permissions and copyrights and handed out permission forms used by other organizations. He found that all of the organizations he contacted expressed interest in collaboration on web postings and links. Blume volunteered to formally ask Joe Serene about the legal issues and then report back to Zimmerman and the EC.

16. Outreach Activities. Cassidy reported that the APS is asking units to help with public and educational outreach and LaserFest. See **Attachment 7.** A speakers bureau is one possibility for FHP. Joint sessions with AAPT is another. No specific actions were taken.

17. New Committees. Lubkin asked for volunteers to serve on various FHP committees and will announce committee assignments soon. Progress as of this writing will be given at the end of these minutes. See **Attachment 8.**

18. New Initiatives. Kane suggested contacting program committees of topical meetings to encourage them to have at least one history speaker at their meetings, to help preserve the histories of those topics and to spur interest and participation in history. He noted that he does not normally attend either of the APS national meetings, but attends 9 small topical meetings per year (meetings not associated with APS). FHP might be able to reach a larger audience this way. Halpern said that it would be nice to have a list of history talks being given elsewhere, ideally on the FHP website. Cassidy commented that we should have a list of historical sites on the FHP website, as well.

19. Certificates of Appreciation were given by Cassidy to retiring EC members: Evenson, Halpern, Pesic, and Riordan. Cassidy will give one to Spencer Weart later at the Denver meeting.

20. The Meeting Was Adjourned at 4:30 pm.

Attachment 1

Editor's Report

By Michael Riordan

The Spring 2009 issue of the "History of Physics" Newsletter brings to an end my three-year term as Editor. It has been a challenging but rewarding experience, and I plan to continue my involvement at least through the end of 2009 as Associate Editor to the next Editor, Dwight ("Ed") Neuenschwander. I do so mainly to ensure a smooth transfer of our customs and practices. During my tenure, I most enjoyed extending and deepening the Newsletter's coverage of the Pais Prize—especially publishing Gerald Holton's eloquent Pais Lecture, "Of What Use is the History of Science?" That Fall 2008 issue is easily the one I'm most proud of.

The Newsletter faces a significant challenge in dealing with the ever-growing costs of publishing in a paper edition, mainly the spiraling costs of mailing it to our nearly 4,000 members. While the Spring and Fall 2008 issues cost only about \$0.30 per copy to print, for example, the average mailing cost began to exceed a dollar. The 12-page spring issue cost \$3,627 to mail, or about \$0.95 each, while the 16-page fall issue cost \$5,570 or about \$1.47 apiece—in part due to a May 2008 increase in postal rates. Some, but certainly not all, of this increase is due to the high costs of mailing to foreign members, which remains under study.

For the Spring 2009 issue, we tried an experiment of publishing the newsletter primarily in electronic-only editions, with members given the option of requesting a paper copy be mailed to them in the usual manner. The Newsletter has long been available online in both HTML and PDF versions—the latter being an exact replica of what goes to the printer and onto paper. Members have been able to—and are now being increasingly urged to—download and print the PDF version themselves, rather than wait for a paper copy to arrive by mail. They can also view and print the online HTML versions page by page, which appear in a different format. With Ed's help, we tried to enhance the HTML edition by including extra illustrations, some in living color. The PDF is available in B&W only, corresponding to the print edition.

For the limited printing of 100 copies, I obtained a cost of \$125 at Kinko's and mailed most of them myself at \$0.42 per copy (because they weighed only 1 ounce). There were about 20 domestic requests for paper copies, plus 5 foreign ones that I specifically asked to download and print the PDF version due to the high costs of foreign mailing. In addition, I mailed copies to all Executive Committee members, Pais Prize winners, and a list of about 20 domestic and foreign libraries especially interested in the

history of physics (e.g., the AIP Niels Bohr Library). The total paper copies mailed thus far stands at 66.

Unfortunately, a preliminary analysis of hits on our web site suggests that there was little, if any, additional viewing of the online Newsletter editions due to the fact that the paper copy was *not* being mailed to members as before. At first glance, it seems that online viewing of the Spring 2009 newsletter (see the attached summary Spring2009.pdf) is roughly the same as Fall 2008. But further analysis is probably required here, as the Fall newsletter is always larger and contains more interesting material, such as reports of our March and April meeting sessions. We need to understand better what can stimulate members to access the online editions.

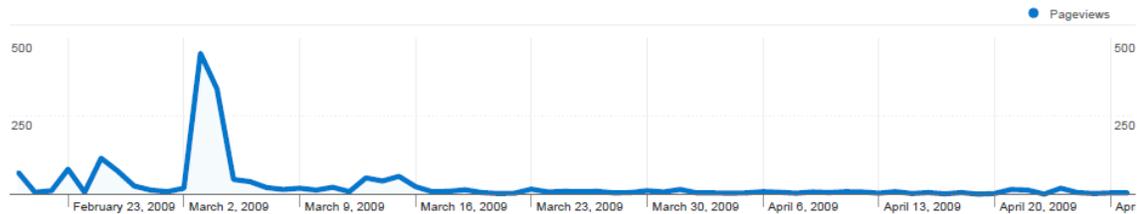
And we also have to determine how best to reduce mailing costs for the paper editions we hope to continue to offer. This will probably require keeping the weight of the newsletter plus any envelope (needed for foreign mail) below 1 ounce in all.

The chart below of hits on the Spring 2009 Newsletter came with this explanation:

"Bounce Rate" is the percentage of single-page visits (i.e. visits in which the person left your site from the entrance page). "% Exit" is the percentage of site exits that occurred from a page or set of pages. Since viewing the PDF is considered leaving the website, you can say that at most all of the bounces viewed the PDF. This would not include people who go directly to the PDF, but I believe you send a link to the main TOC page and not directly to the PDF, so this shouldn't be a big number. So, multiply the pageviews for index.cfm by the bounce rate. You could get more conservative numbers by using any other combination of (pageview or unique pageview) x (bounce rate or %exit). But, the numbers below should be the upper limit of PDF views.

Spring 2009: $819 \times .5423 = 444$

Fall 2008: $895 \times .4924 = 440$

**10 pages were viewed a total of 1,854 times**

Filtered for pages excluding "render"

Content Performance							
Pageviews 1,854 % of Site Total: 0.18%	Unique Pageviews 1,456 % of Site Total: 0.18%	Avg. Time on Page 00:01:24 Site Avg: 00:01:21 (3.39%)	Bounce Rate 68.36% Site Avg: 59.19% (15.48%)	% Exit 49.24% Site Avg: 41.38% (19.02%)	\$ Index \$0.00 Site Avg: \$0.00 (0.00%)		
Page	Pageviews	Unique Pageviews	Avg. Time on Page	Bounce Rate	% Exit	\$ Index	
/index.cfm	819	556	00:00:45	54.23%	41.39%	\$0.00	
/pais.cfm	228	197	00:03:05	85.31%	65.79%	\$0.00	
/book.cfm	225	199	00:02:44	86.03%	67.11%	\$0.00	
/candidates.cfm	181	158	00:03:00	78.30%	69.61%	\$0.00	
/kennefick.cfm	94	80	00:01:30	75.00%	44.68%	\$0.00	
/wehearthat.cfm	87	82	00:01:16	100.00%	36.78%	\$0.00	
/sessions.cfm	71	57	00:01:21	85.71%	42.25%	\$0.00	
/chair.cfm	67	57	00:01:34	88.89%	31.34%	\$0.00	
/nominations.cfm	42	38	00:01:32	81.25%	38.10%	\$0.00	
/editor.cfm	40	32	00:00:47	100.00%	15.00%	\$0.00	
							1 - 10 of 10

Attachment 2**Secretary-Treasurer Report, May 2009 (Tom Miller)**

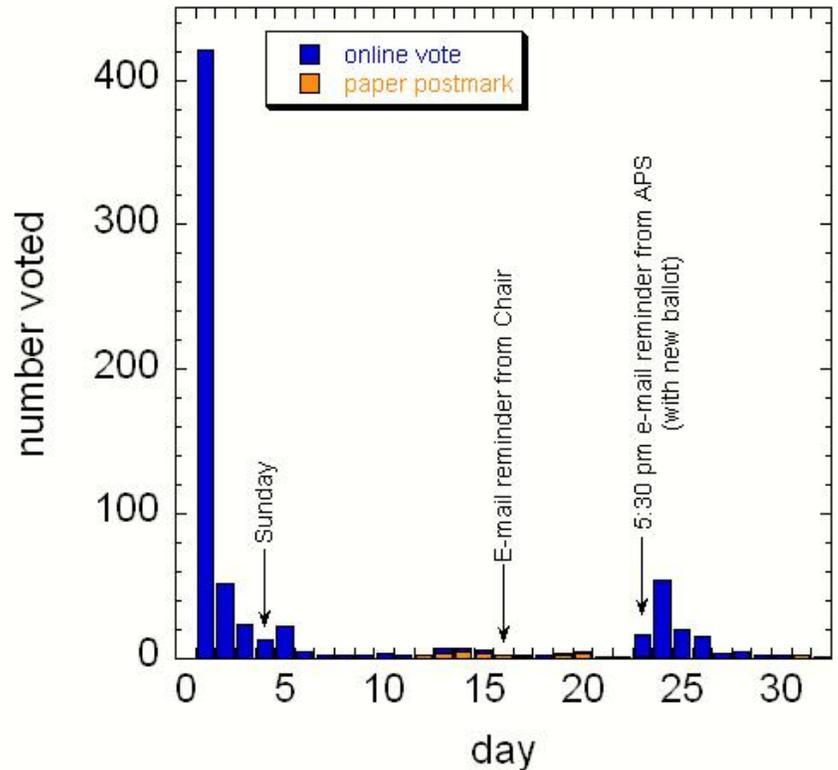
1. Membership. The FHP membership is down this year, from 3928 to 3842 (from 8.5% of APS down to 8.1%). There are many factors involved, policy and financial, making it complicated to pin down a reason. I suspect it's mainly tied up with the greatly increased APS membership as a result of offering free membership to students (for a year, then only \$20). Whether students check off FHP or not makes a big difference. I don't think it's anything to be worried about, but if there's an idea for getting the students to check "FHP" on their membership forms, let's hear it.

2. Election. Of 3775 members, 718 voted in the election (28 with paper ballots, 2 postmarked after the election had ended), or 19.0%. Last year: 14.6%. Following the "April" APS meeting in May, the Vice-Chair will be Marty Blume, and the new at-large

members of the Executive Committee will be Paul Cadden-Zimansky and Cathryn Carson. David Cassidy verified the online results.

Most of the online voting takes place immediately upon receipt of the e-mail ballot. E-mail reminders don't accomplish anything unless a new ballot is included. This year was the first time a reminder was sent *with a new ballot*, and it pushed us to our highest voting percentage ever. Paper ballots cost money and never change the outcome because they always mirror the online voting. The number of paper ballots mailed out this year was about 150. The number of paper ballots returned has decreased over the past four years: 63, 53, 41, 28. A fit to these data implies that no paper ballots will be received in the 2011 election.

FHP 2009 Election. Note that paper ballots are not mailed out immediately; APS waits to see which e-mails bounce.



3. Treasury. FHP has

maintained a baseline bank balance of about \$15,000 as insurance against colossal disasters or mistakes. Income each calendar year consists of an allocation from APS dues 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 or student travel grants). Expenses are mainly travel to Executive Committee meetings and sorters meetings and the printing and mailing costs of the newsletters, aside from distributing the earmarked donation money to lecturers and students. For the calendar year 2008:

Income:

FHP share of dues, \$17,254.

FHP share of March meeting, \$789.

FHP share of April meeting, \$873.

Interest income, \$1,846.

Trimble donation for newsletter and EC lunch, \$5,000.

Sponsored lecture donation, \$1,200.

Unknown donation, \$100.

TOTAL INCOME: \$27,062.

Expenses:

Newsletter printing, \$2,396.

Newsletter mailing, \$9,196.

EC meeting travel, \$6,556.

Sorters meetings, \$156.

EC lunch, \$1,118.

Speakerphone at EC meeting, \$150.

Manhattan Project travel grants, \$2,000 (APS and FPS paid additional \$2k).

Manhattan Project lecture, \$1,341.

Manhattan Project fee waivers, \$1,040.

Manhattan Project breakfast and lunch, \$314.

Postage and overnight mailing, \$259.

Invited (sponsored) lectures, \$2755.

Student travel grants (3), \$1,800.

TOTAL EXPENSES: \$29,081.

Starting in January 2008, the APS gives more dues money to forums, which meant an additional \$2,394 for FHP in 2008. The new formula for dues money is $\$2,000 + \$5.50 \times (\text{number of FHP members up to 3\% of APS total membership}) + \$3.00 \times (\text{number of FHP members exceeding 3\% APS total membership})$. However, because of expenses for the Manhattan Project reunion and the increase in mailing costs for the Fall 2008 newsletter, we ended the year with a \$2,019 loss (i.e., our baseline, reserve bank account went down by \$2,019). [Later note: a mistake at APS in the Fall 2008 Newsletter mailing costs will wipe out this deficit if we can get them to correct it.]

In the year 2009 we should have EC and sorters travel expenses of \$11,000, newsletter costs between \$150 to \$7,000 (depending on whether we have zero or one paper newsletter), a \$900 Executive Committee lunch, and as much as \$3,000 for support of invited speakers for whom no donation is available. The total expenses are estimated at \$15,000 to \$22,000. Income consists of \$16,868 (dues), \$1,700 investment interest, \$1,700 March and April meeting shares, for a total of \$20,300, not counting donations for students and sponsored lectures (which yield no net gain or loss). So we will either show a profit or a loss depending on the as yet unknown 2009 newsletter mailing cost and invited speaker costs.

The APS Director of Finance/Controller has set up a separate FHP Endowment account because of generous endowment donations by Virginia Trimble and a former FHP officer who wishes to be anonymous for the time being. The latter has donated \$10,718 (\$5,000 in 2007 and an additional \$5,718 in 2009), and Trimble has very recently donated \$14,000 to reinforce the endowment. [Trimble has made many gifts to FHP over the years, but for special purposes rather than for an endowment, until now.] The FHP Endowment account is listed among the "Permanently Restricted" prize and award accounts on the monthly statements. A separate "FHP Lectureship Fund" was also set up for the 6.5% interest on the endowment (presently \$1,600 per year). The APS uses its reserves to guarantee that the endowment will not lose money. I recommend that the EC use these endowment donations as a springboard toward building up the endowment.

With the donors' permission, perhaps a big announcement of the endowment donations, along with enumeration of the kind of activities FHP will support with interest on the endowment, would spur further donations, whether large or small.

4. FHP Bylaws. The FHP Bylaws get changed by a process starting with EC vote, then approval by APS committee and Council, and finally a vote by FHP members. The FHP Bylaws shown on our website have had two corrections made by me in conjunction with Ken Cole (who coordinates with the Constitution and Bylaws Committee of APS) without discussion or voting. One is a spelling change, from Councillor to Councilor, to bring FHP in alignment with APS. The change puts to rest the annual question of how "Forum Councilor" should be spelled in EC minutes and other documents or ballots. The second change was to remove a clause [in Article VII(4)] that was in violation of the APS Bylaws [Article VIII(4)], "unless the current Forum Councillor is renominated, in which case a second candidate may or may not be nominated." Ken Cole agreed that this change should be made without a formal process because FHP cannot violate the APS Bylaws (even if the FHP Bylaws were approved, in error), and it wouldn't matter how the FHP EC and membership voted on keeping or repealing the clause – it would still be void. It helps the institutional memory problem to simply delete the clause from the FHP Bylaws. Speaking of institutional memory:

5. Institutional Memory. Looking back at old records, I often find an action taken by the EC which very shortly seems to have been forgotten. Travel expense policies. Endowment drives. Donations policies. A book project that was approved by the EC, but ceased to be discussed by successive ECs. The problem of the Forum Councilor's term being out of sync with the EC terms, requiring a second election. Appointing someone to look into some proposal, with no further mention of an outcome. None of these things paralyze FHP—it's more an issue of wasting time. I don't know what to do about this except to keep a separate document (action items) listing motions passed by the EC, and have S-T and Chair review these for relevance each year, and repeal those that are no longer useful.

6. Preserving FHP Records. All FHP records these days (since about 1998) are electronic and stored on CDs. I have a cardboard box (copier-paper size) of some paper records that I have not examined beyond a cursory look. Should FHP records have a permanent home? Are electronic copies good enough? Most of the electronic ones are MS Word or MS Excel format with old and new versions, but a few are WordPerfect format. Will future historians be able to read all of these? Printing them all out on paper would be more of a project than I'd want to take on, and most are pretty boring to begin with. But some are worth saving, as on the origin of the historical sites project and the Pais Prize. [At the EC meeting, Anderson said that the NBLA could archive FHP records, both paper and electronic files, and they can read electronic files created with any software that AIP's IT division supports, which may include some old software versions.]

7. Countries represented in FHP (Foreign members = 15%)

(From a list of 3842 FHP members provided by APS on April 13, 2009.)

Canada	113
Japan	62
Germany	53
UK	40
Spain	28
Mexico	26
Switzerland	23
France	22
Netherlands	21
Italy	17
Brazil	15
Israel	13
China	12
Turkey	12
Taiwan	10
India	9
Denmark	8
Greece	8
Australia	7
Chile	6
Norway	6
Korea	6
Austria	5
Belgium	5
Sweden	5
Portugal	4
Romania	4
Argentina	3
Finland	3
New Zealand	3
Singapore	3

2 each: Columbia, Czech Republic, Ireland, Latvia, Serbia-Montenegro, United Arab Emirates

1 each: Costa Rica, Croatia, Cuba, Cyprus, Indonesia, Iran, Lithuania, Nigeria, Pakistan, Thailand, Russia, Saudia Arabia, Slovak Republic, South Africa, Ukraine, Venezuela

Attachment 3

REPORT ON DEPARTMENT HISTORIES

George Zimmerman

On September 29, 2008, Bob Arns and George Zimmerman sent the letter below soliciting the writing of Departmental Histories to 766 Physics Departments. The e-mail addresses were furnished to us by Joe Anderson, Director of The Niels Bohr Library and Archives.

Of the mailings, 10 bounced back. We have received 26 replies that either directed us to histories or expressed the intent to write a Department History. Of those, 21 histories were submitted The Niels Bohr Library and Archives, and an additional 4 were received by them for a total of 25 additional histories added due to our efforts. A 3.3% success.

An additional letter was planned to be sent by us to Industrial Laboratories soliciting their Histories. However we decided to postpone the mailing because we received only 14 addresses from the Niels Bohr Library and Archives, and The Niels Bohr Library and Archives had recently done a study of histories at industrial labs. The study was sponsored by a grant.

In my opinion, the effort was worthwhile and, with the cooperation of The Niels Bohr Library and Archives, we should continue it next year. We will also attempt to get more addresses for industrial and Government labs and, with EC approval, expand the effort.

COPY OF E-MAIL LETTER SENT TO PHYSICS DEPARTMENT CHAIRS

September 29, 2008

Dear Department Chair:

We are writing on behalf of the **Executive Committee of the APS Forum on the History of Physics** to ask your help with developing and maintaining the historical record of our profession. The AIP Center for the History of Physics and the Niels Bohr Library & Archives have become valuable resources for physicists and historians. Now we need to renew our efforts to extend the record to individual departments and laboratories.

At our last meeting we were delighted to learn that the Forum on the History of Physics now has nearly 4,000 members and that over 1,000 of these are student members of APS. These numbers plus the gratifying attendance at the history sessions at the March and April meetings have convinced us that interest in the history of physics is continuing to grow. Moreover, this interest is not confined to national or regional meetings or to events at One Physics Ellipse, College Park. It's high time that we recognize that every physics department and laboratory and research group has a story to tell.

Departmental and laboratory histories have many benefits. History is not just for historians or for entertainment. A story told well can be enormously instructive to those who encounter similar challenges at a later time. Our stories can help us to recruit students and faculty members, and to write grant proposals and periodic reports for funding agencies. They can help us understand and celebrate lines of inquiry that are no longer central to current research. We need to tell our local stories and to make these available to other physicists and other departments.

We are not asking department chairs to undertake the writing of departmental histories. We *are* asking you to preserve and make available historical accounts of what your department has done and accomplished. We are also asking that you encourage your retiring faculty to leave a vita and comments on their accomplishments, from their perspectives, on their careers. Also their future plans. These accounts need not represent a complete history. The best departmental histories that we have seen represent the gathering of material collected and summarized by a succession of different authors at different times – sometimes comprising a report on the department's efforts during a particular era of physics history. Department chairs are especially well placed to encourage and gather together these kinds of records and reports. The most beneficial locations for these pieces of histories are likely to be departmental websites. But we hope that you will also deposit a copy in the Niels Bohr Library & Archives with

Joe Anderson, (janderso@aip.org); Telephone: 301-209-3183
Director, Niels Bohr Library & Archives
American Institute of Physics
One Physics Ellipse
College Park, MD 20740-3843 – and please let us know when you do so.

Thanks for taking the time to read this and please don't hesitate to contact us if you have questions.

Bob Arns, University of Vermont
robert.arns@uvm.edu

George Zimmerman, Boston University
goz@buphy.bu.edu

Attachment 4

Sessions at APS meetings in 2009

By Gloria Lubkin, Forum Chair-Elect, and Daniel Kleppner, Vice Chair

The Program Committee put together some varied and interesting invited sessions for the March and “April” APS Meetings this year. The March meeting occurred in Pittsburgh March 16–20, while the “April” meeting was held May 2–5 in Denver.

At the March meeting, we had three invited sessions. Two focused on the impact of highly influential and greatly admired theorists: Lev Davidovich Landau, who worked in the Soviet Union and created what is known as the Landau School, and Philip Anderson—still active and publishing in his eighties. The third session dealt with the origins of Silicon Valley, covering the period from 1910 through the 1960s.

At the “April” meeting, the Forum had four invited sessions. We organized sessions on the history of telescopes, accelerators (co-sponsored with the Division of Physics of Beams), and science policy (co-sponsored with the Forum on Physics and Society). In addition, a session on John Wheeler’s legacy was organized by the Topical Group on Gravity and co-sponsored by the Forum. The history of telescopes session commemorated the 400th anniversary of the invention of the telescope. The session on science policy included as speakers two former Presidential Science Advisers, John Gibbons and Neal Lane.

The contributed sessions were “Physics Education and History” on March 19, jointly with FEd, with 13 papers, and “History and Philosophy of Science” on May 3, with 7 papers.

Invited Sessions at the March Meeting

Origins of Silicon Valley

Gloria Lubkin, Chair

Monday, 16 March 2009, 2:30–5:30p.m.

- Stewart Gillmor, Wesleyan University, “Prehistory of Silicon Valley, from 1910 to 1965”
- David Leeson, Stanford University, “W. W. Hansen, Microwave Physics, and Silicon Valley”

- Michael Riordan, University of California, Santa Cruz, “From Bell Labs to Silicon Valley: A Saga of Technology Transfer, 1954–1961” (The John Bardeen Lecture)
- James Gibbons, Stanford University, “The Origins and Development of the Silicon Valley Startup Model”

Centenary of Lev Landau

Gloria Lubkin, Chair

Wednesday, 18 March 2009, 8:00–11:00 a.m.

- Pierre Hohenberg, New York University, “Lev Landau: A View from the West”
- Lev Pitaevskii, University of Trento and Landau Institute, Moscow, “Landau and Theory of Quantum Liquids”
- Valery Pokrovsky, Texas A&M University, “Landau and Theory of Phase Transitions”
- Igor Dzyaloshinskii, University of California, Irvine, “Landau and Feynman Diagrams”
- Roald Sagdeev, University of Maryland, “Landau’s Contributions to Applied Physics”

Fifty Years of Anderson Localization

David Thouless, Chair

Thursday, 19 March 2009, 2:30–5:30 p.m.

- David Thouless, University of Washington, “Anderson Localization in the Seventies and Beyond”
- Robert Dynes, University of California, San Diego, “Tests of Localization in Metals and Semiconductors”
- Mordechai Segev, Technion-Israel Institute of Technology, “Anderson Localization of Light”
- Igor Lerner, University of Birmingham, “Anderson Localization and Mesoscopics”
- Alain Aspect, Institut d’Optique, Palaiseau, “Direct Observation of Anderson Localization of Matter Waves in an Optical Disorder”

Invited Sessions at the “April” Meeting

The Legacy of John Wheeler

Stanley Whitcomb, Chair

(cosponsored with GGR)

Saturday, 2 May 2009, 10:45 a.m.–12:33 p.m.

- Kenneth Ford, American Institute of Physics, retired, “John Wheeler, 1933–1959: Particles and Weapons”
- Kip Thorne, California Institute of Technology, “John Wheeler, 1952–1976: Black Holes and Geometrodynamics”
- Wojciech Zurek, Los Alamos National Laboratory, “John Wheeler, 1976–1996: Law Without Law and Quantum Information”

History of Telescopes

Daniel Kleppner, Chair

Saturday, 2 May 2009, 1:30–3:18 p.m.

- * Nichals Woolf, Steward Observatory, “The Bionic Telescope”

- * Paul Vanden Bout, National Radio Astronomy Observatory, “Radio Telescopes: A Technological Saga Sparked by Serendipity”
- * Christine Jones, Center for Astrophysics, Harvard University, “Black Holes, Dark Matter, and Dark Energy: Measuring the Invisible through X-Rays”

Science Policy: Yesterday, Today, and Tomorrow

Daniel Kleppner, Chair

(cosponsored with FPS)

Sunday, 3 May 2009, 8:30–10:18 a.m.

- John Gibbons, Assistant to the President for Science and Technology, 1993–1998, “Lessons from Skating on Thin Ice: Office of Energy Conservation, Office of Technology Assessment, and Office of Science and Technology Policy”
- Neal Lane, Rice University, “Civic Scientist Era”
- Lewis Branscomb, Kennedy School of Government, Harvard University, “Science as a Model for Rational, Legitimate Government”

History of MURA, Fermilab, and the SSC

Gloria Lubkin, Chair

(cosponsored with DPB)

Monday, 4 May 2009, 3:30–5:18 p.m.

- Lawrence Jones, University of Michigan, “Innovation Was Not Enough: The History of the Midwestern Universities Research Association”
- Adrienne Kolb, Fermi National Accelerator Laboratory, “Fermilab: The Ring of the Frontier, 1967–1995”
- Stanley Wojcicki, Stanford University, “A Personal Recollection of the SSC’s Birth and Demise”

More details on these sessions, including some abstracts of papers can be found on the Web at:

<http://www.aps.org/meetings/march/>

<http://www.aps.org/meetings/april/>

These sessions will be audiotaped and the recordings placed on the Forum website.

Attachment 5

APS Council Meeting
 Sheraton Denver Hotel
 Denver, Colorado
 April 30-May 1, 2009

FHP Councilor’s Report

The following APS Council items and actions are germane to the APS Forum on the History of Physics:

1. After the Council dinner on Thursday, April 30, Judy Franz was treated to a

traditional “roast” on the completion of her fifteen years of service as APS Executive Officer. Her successor was announced and approved by Council the following morning, but cannot become public knowledge until all arrangements are finalized and the APS puts out an appropriate press release. [The APS just now put out a press release announcing the appointment of Kate Kirby as APS Executive Officer.]

2. APS President Cherry Murray urged everyone to listen to President Obama’s speech at the National Academy of Sciences on April 27 in which he emphasized his commitment to supporting science and science education.

3. Outgoing APS Executive Officer Judy Franz reported: (a) That APS membership has continued to grow, especially student memberships, so the challenge now is to retain them. I note that FHP membership declined from 3,928 in 2008 to 3,776 in 2009, representing a percentage decline from 8.49% to 8.00% of APS membership. The FHP ranks fourth out of six APS Forums in membership. (b) That she wrote a letter to Jeff Faber at CBS strongly objecting to its “60 Minutes” program on cold fusion on April 19, which portrayed APS as endorsing cold fusion, to which CBS responded rapidly and seriously, for example, by expunging APS from CBS’s program on its website. (c) That a new link on the APS website to its *Weekly NewsBrief* was launched on April 23. (d) That she testified before Chairman Mollohan’s Congressional Subcommittee, urging the appropriation of \$150-200 million in FY 2010 and FY 2011 for one-shot start-up grants for young faculty members at colleges and universities. (e) That APS conducted a survey of members in 2008 that garnered an astonishing 49 % response rate among whose results were (i) the percentage of U.S. members who ranked *Physics Today* as valuable or extremely valuable declined from 77% in 2004 to 70% in 2008; and (ii) that “supporting the physics community” as a reason for joining APS increased from 41% in 2004 to 52% in 2008. (f) That the Ethiopian Physics Association of North America (EPS-NA) requested APS to assist it in gaining tax-exempt status, the means by which to accomplish this generated considerable discussion and will be settled later.

4. APS Director of Public Affairs Michael Lubell presented a statement that the Panel on Public Affairs (POPA) proposed, which Council subsequently approved, urging that if the National Nuclear Security Agency (NNSA) is moved from the Department of Energy (DOE) to another agency such as the Department of Defense (DOD), then it is imperative that NNSA’s facilities and laboratories “remain available for unclassified research by our nation’s best university based scientists.” Lubell also reported that POPA has released its report on “Nuclear Weapons in the 21st Century,” which already is having an impact on the U.S. and some European governmental bodies. Similarly, the results of POPA’s “Study on Energy Efficiency” has been taken very seriously and money for related research was put into the Stimulus Bill. Four more studies have been approved by POPA, to wit, on a follow-up of the Energy Efficiency Report; on non-carbon capture; on the downsizing of the nuclear arsenal; and on scarce elements such as lithium, whose major producer is Columbia, and which is in increasing demand for lithium batteries.

5. APS Treasurer/Publisher Joseph Serene reported that while the expenses of APS’s operations rose in 2008, they remained roughly equal to its revenue, and despite a

drop in its investment income from about \$105.5 million in 2007 to about \$77 million in 2008, the APS has weathered the economic downturn in relatively good shape. Further, the revenue from APS's research publications still exceeded its expenses by roughly \$6 million in 2008, with print subscriptions continuing to decline somewhat and online subscriptions continuing to grow. He then presented some modest changes in subscription rates that would produce a projected net revenue from publications of about \$2.68 million in 2010. Thomas Glasmacher, Chair of a Task Force on Journal Pricing, reported later that based upon its work over the past two years they are proposing various modifications of the APS journal pricing structure, which APS will now study, realizing that no changes could be introduced earlier than 2011.

6. In the absence of Paul Wolf, Chair of the 2009 APS Audit Committee, I presented our report, noting that APS's audit firm, BDO Seidman, issued an unqualified clean opinion and concluded that APS is "running a tight ship." I note, in particular, that the net asset of the Pais Prize increased from \$220,918 on December 31, 2007, to \$223,973 on December 31, 2008. We also heard reassuring reports from Bob Kelly and Tracy Alinger on Ridge's and College Park's Business Continuity Plans in the event of some unforeseen disaster. Finally, we recommended that APS retain BDO Seidman as its audit firm next year.

7. APS Editor-in-Chief Gene Sprouse reported that the annual submission of manuscripts continued to increase by about 5%, with those by Chinese authors more than doubling between 2001 and 2008. The new online journal *Physics* had more than 16,000 hits in the week of April 19. The revised Copyright Agreement allows authors to own the copyright of "derivative works" under reasonable conditions. The Ridge Task Force has concluded that Ridge definitely needs more space and is exploring various options to acquire it.

8. APS Director of International Affairs Amy Flatten reported that instead of getting better the delay by the U.S. State Department in issuing U.S. visas to foreign students and scholars has become dramatically worse, with delays at present from four to five months. She and others were taking steps to address this problem but at the last minute were told to "stop the presses," because the State Department will soon issue reforms. She will inform APS members of these reforms as well as changes in the Department of Commerce's Control List of exported products as soon as they are known.

9. APS Director of Education and Diversity Ted Hodapp reported on past and future work of the NSF-supported Physics Teacher Education Coalition Program (PhysTEC), which is devoted to the education of physics and physical science teachers, has supported conferences and workshops, has grown to encompass 135 member institutions, and will award 11 one-year \$15,000 scholarships to teachers at 4 of these institutions. APS also has awarded 402 minority scholarships of \$2,000 for the first year and \$3,000 for the second year; of these APS has data on 309 of the recipients showing that around 50% received bachelor's degrees and that 36 of these went on to receive Ph.D. degrees in physics, and 11 in astronomy or other fields in science, technology, engineering, or mathematics. Further, with money remaining from the successful

conference on “Graduate Education in Physics” that took place from January 31 to February 2, 2008, Hodapp is organizing “Gender Equity Conversations” involving 224 volunteers at 15 sites over the next two academic years, the results of which will be published in the form of an anthology.

10. APS Associate Executive Officer Alan Chodos reported that in recognition of the 50th anniversary of the birth of the laser next year APS and the Optical Society of America (OSA) are organizing a LaserFest (www.laserfest.org), with funding from APS, NSF, and DOE of about \$1 million, whose yearlong events in 2010 will include (a) a travelling exhibit and demonstrations; (b) videos, educational materials, and giveaways; and (c) a PhysicsQuest puzzle for middle-school students featuring “Spectra,” a female superhero. The APS Division of Laser Science (LS) and Forum on Industrial and Applied Physics (FIAP) are planning symposia for the March 2010 APS meeting. If the FHP has suggestions for speakers or topics, the people to contact are LS Councilor Steven Rolston (rolston@umn.edu) and FIAP Councilor Stefan Zollner (zollner@mailaps.org).

11. APS Director of Public Affairs Michael Lubell reported on the discouraging history and the “spectacular” present state of funding for physics under the Obama Administration. In particular, the Stimulus Bill provided an increase of \$10 million for science, and NSF has received a 7% increase in funding for FY 2009. Of great importance for the future is that Representative David Obey, Chair of the House Appropriations Committee, who focused earlier mostly on NIH funding, has now become a big champion of NSF. Council expressed its great appreciation to Lubell and his staff for their work on behalf of APS.

12. APS Associate Executive Officer Alan Chodos presented a proposal of the APS Texas Section to establish a Distinguished Service Award to be given annually to one or more or none of its members, and a proposal of the APS Division of Biological Physics to establish an annual award for Outstanding Doctoral Thesis Research in Biological Physics. Council approved the establishment of both of these awards.

13. Outgoing APS Executive Officer Judy Franz presented proposed amendments of the appropriate Bylaws (a) to establish a Standing Committee on Informing the Public (CIP) [First Vote]; (b) to increase the size of the Committee on Education from 9 to 12 members [Second Vote]; (c) to establish a Topical Group on Energy Research and Applications [First Vote]; (d) to increase the term of the Councilor representing the Forum on Graduate Student Affairs from 2 to 4 years, which would allow him or her to serve on the APS Executive Board; and (e) to add Puerto Rico to the APS Southeastern Section. Council approved all of these amendments.

14. APS General Councilor Robert Austin presented a proposal, signed by 51 physicists, to make revisions in the already approved APS Statement on Climate Change, basically to adopt an agnostic stance on the scientific evidence for climate change. APS President Cherry Murray will appoint a high-level subcommittee to consider these proposed revisions to the APS Statement on Climate Change and to report to her any recommendations for changes in it, which for approval would follow normal channels

through POPA and Council.

Respectfully submitted,

Roger H. Stuewer
FHP Councilor

Attachment 6

Report on APS Unit Convocation
American Center for Physics
College Park, MD
28 February 2009

FHP representatives: David Cassidy, Gloria Lubkin, Daniel Kleppner

Among the highlights were:

1. Cherry Murray, APS President, Discussion Topic: “Making the Physics Community More Inclusive.” Murray noted that in international comparison the US now ranks fourth in science and engineering research. It is also down the list in the production of PhDs, while submissions to PR and PRL by foreign physicists are increasing—all of which indicates a leveling of the international landscape. Murray also indicated that about 30% of non-student APS members are from outside the US, while most student members are in the US. This suggests the need for units to extend their outreach beyond national borders.
2. Membership statistics (also available on the Web): While APS is now at record membership, 47189, the steady increase in FHP members since 2005 ended this year with a drop by 153 to 3775 (8.0 % of APS). Of these 1017 are students, representing 26.8% of our members.
3. Michael Lubell, APS science lobbyist, reported that federal stimulus funds will soon be flooding grant agencies. All agencies will have websites on how the money is being spent, and APS will have links to these. Stimulating the US economy and creating jobs through scientific research will be the main goals of the funds granted.
4. Daniel Dahlberg, chair of the Committee on Informing the Public, asked all units to increase their visibility through public outreach activities. Units are to submit their activities to Rebecca Flagg at APS for listing on the APS website. Alan Chodos suggested that the planned LaserFest during both Spring 2010 APS meetings would offer a good opportunity for unit educational outreach activities.
5. During the meeting of the forums, ways to reach more students were discussed. Some suggestions included a special section of the newsletter by and for students and joining new APS initiatives on social networking sites, such as Facebook and LinkedIn. For other

members, greater use of unit websites was strongly suggested (for which FHP seems to be in the lead).

Attachment 7

From: APS OUTREACH [mailto:outreach@aps.org]
Sent: Tuesday, February 10, 2009 3:00 PM
To: APS OUTREACH
Subject: Letter from the Chair of the CIP

Dear Unit Officer,

I'm writing, as Chair of the new APS Committee on Informing the Public, to ask your help in a project that will increase the visibility of the outreach activities your unit is currently undertaking.

Our goal is to list all the outreach initiatives of the various APS units on a single web page. Please send to Rebecca Thompson-Flagg of the APS , flagg@aps.org, any ongoing outreach activities in your unit. Include the name of the activity, the web address if any, the name of the individual in charge, and a brief description of the activity. We are interested in any programs you may have that are designed to bring the excitement and importance of physics to an audience beyond the physics community.

We are also interested in similar information from individual members of your unit, if you can obtain it from them and pass it along.

We view this as an important step both in increasing the effectiveness of existing APS outreach activities, and also in encouraging more units and members to create programs of their own. I look forward to hearing from you, and thanks in advance for your help. We will provide the web address for this new APS outreach page as soon as it is up.

Best regards,
Dan Dahlberg
Chair, Committee on Informing the Public

E. Dan Dahlberg
Professor of Physics
Institute of Technology Distinguished Professor
Director, Magnetic Microscopy Center
Physics, U of Minnesota
116 Church St. S.E.
Minneapolis, MN 55455
ph (612) 624-3506
fax (612) 624-4578

From: LaserFest [mailto:LaserFest@aps.org]
Sent: Tuesday, February 03, 2009 5:36 PM

Dear APS Unit Officers,

We are pleased to invite you to participate in LaserFest, a year-long celebration of the 50th anniversary of the laser in 2010. APS and The Optical Society of America are partnering to organize this commemoration, which will emphasize the huge impact of the laser, highlight its potential for the future, and illustrate the importance of scientific research and innovation. To learn more, please visit our recently launched website at www.laserfest.org.

Through a series of events and programs nationally and internationally, such as debates, symposia, and demonstrations; a kick-off dinner in Washington DC, and laser light show on Capitol Hill, LaserFest aims to showcase the prominence of the laser in all aspects of public life.

LaserFest is designed as a public outreach activity. To successfully reach as wide an audience as possible, it will require broad participation from within the scientific community. We invite and strongly encourage the executive committees of all units to organize independent LaserFest activities and events for the 2010 year, and to register them on the LaserFest website so they can be incorporated in a comprehensive calendar of events.

These may include special symposia or public lectures at APS meetings, or even stand alone topical conferences where lasers are given special emphasis. Please see if your members have ideas and share them with us. In addition, we are seeking interesting, colorful, and quality images of lasers, laser light, and experiments where lasers are key. Your name (s) and institution will be credited under all images on our website, www.laserfest.org.

For event ideas, questions, suggestions, or to send images, please contact Nadia Ramlagan, LaserFest Project Coordinator at ramlagan@aps.org or 301-209-3204.

Best wishes,
Judy
APS Executive Officer

Attachment 8

2009-2010 Committee Membership

Executive Committee

Gloria Lubkin

Chair

[glorialubkin\(at\)gmail.com](mailto:glorialubkin(at)gmail.com)

Daniel Kleppner	Chair Elect	kleppner(at)mit.edu
Martin Blume	Vice Chair	blume(at)aps.org
Tom Miller	Secretary-Treasurer	millertf(at)bc.edu
Francis Everitt	Member-at-large	francis(at)relgyro.stanford.edu
Robert Arns	Member-at-large	robert.arns(at)uvm.edu
Paul Cadden-Zimansky	Member-at-large	pc2423(at)columbia.edu
Cathryn Carson	Member-at-large	clcarson(at)berkeley.edu
George Zimmerman	Member-at-large	goz(at)bu.edu
Gordon Kane	Member-at-large	gkane(at)umich.edu
David Cassidy	Past Chair	chmdcc(at)optonline.net
Roger Stuewer	Councilor	rstuewer(at)phys.umn.edu
Gregory Good	CHP-rep	ggood(at)aip.org
Ed Neuenschwander	Editor	dneuensc(at)snu.edu

Program Committee

Dan Kleppner	Chair	kleppner(at)mit.edu
Martin Blume	Vice Chair	blume(at)aps.org
William Blanpied		bblanpied(at)aol.com
Francis Everitt		francis(at)relgyro.stanford.edu
Charles Holbrow		cholbrow(at)mdel.colgate.edu
George Zimmerman		goz(at)bu.edu
Gloria Lubkin, ex officio		glorialubkin(at)gmail.com
Tom Miller, ex officio		millertf(at)bc.edu

Fellowship Committee

Martin Blume	Chair	blume(at)aps.org
William Evenson		bill(at)evenson.ch
Elizabeth Garber		garber(at)gmlc-associates.com
Paul Halpern		p.halper(at)usip.edu
Lillian Hoddeson		hoddeson(at)iuuc.edu

Nominating Committee

David Cassidy	Chair	chmdcc(at)optonline.net
Paul Halpern	APS-rep	p.halper(at)usp.edu
Robert Arns		robert.arns(at)uvm.edu
Allan Franklin		allan.franklin(at)colorado.edu
Gordon Kane		gkane(at)umich.edu
Catherine Westfall		cwestfall(at)nscl.msu.edu

Editorial Board and Publications Committee

Ed Neuenschwander	Editor	dneuensc(at)snu.edu
Michael Riordan	Chair, Assoc. Editor	mriordan(at)ucsc.edu
Ben Bederson		ben.bederson(at)nyu.edu
Bill Evenson		bill(at)evenson.ch

Award Committee (vacant)

Pais Prize Committee (Feb 2009 - Feb 2010) (ad hoc)

Laurie Brown	Chair	lbrown(at)northwestern.edu
Stephen Brush	Past Winner	
Gregory Good	AIP-rep	ggood(at)aip.org
Elizabeth Garber		graber(at)gmlc-associates.com
Robert Crease		rcrease(at)nodes.cc.sunysb.edu

Department Histories (ad hoc)

George Zimmerman	goz(at)bu.edu
Robert Arns	robert.arns(at)uvm.edu

FHP Webmaster (ad hoc)

George Zimmerman	goz(at)bu.edu
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Minutes of the annual FHP business meeting, May 4, 2009

The meeting was called to order at 5:30 pm by Forum Chair David Cassidy. Seven FHP members were in attendance, all members of the EC, so the meeting was adjourned, after a suggestion that in future years, the FHP business meeting be held at the end of the EC meeting. Harry Lustig was passing by and was asked to join for a photograph (l-r, Roger Stuewer, George Zimmerman, Bob Arns, Harry Lustig, Gloria Lubkin, David Cassidy, Dan Kleppner, and Tom Miller). It was suggested that a photo should also be taken at each of the annual EC meetings and pasted into the minutes. [Later note: this photograph appeared in the June 2009 APS News under the headline, “Historic Meeting.” Photo credit: George Zimmerman.]



