



**Executive Committee Meeting  
 March 14, 2006, Baltimore MD  
 Minutes and Notes by Bruce Mason  
 DRAFT**

**Voting Members Present:** David Haase, Paula Heron, Ramon Lopez, Ernie Malamud, Bruce Mason, Peggy McMahan, David Meltzer, Greg Snow, Gay Stewart, Lawrence Woolf, Peter Zimmerman

**Voting Members Absent:** Karen Cummings

**Non-voting Members Present:** Jack Hehn (AIP), Ted Hodapp (APS), Dick Peterson (AAPT)

**Guests Present:** Martin Bloom (APS), Wolfgang Christian (Excellence in Education Award), Jessica Clark (APS), Guenther Eichhorn (ADS), Judy Franz (APS), Charlie Holbrow (AAPT), Michael Kurtz (ADS), Tom McIlrath (APS)

**Chair Ramon Lopez called the meeting to order at 11:40 a.m.**

**Approval of Minutes:** There was a misspelling of a name in the minutes. Minutes for the December 12 teleconference were accepted unanimously, with this change.

**AAPT Representation:** Dick Peterson noted that it had been decided that the Past President of the AAPT Executive Board will be the AAPT representative on the FED Executive Council, and the President will be the AAPT representative to the APS Council.

**Treasurer's Report:** The budget report for 2005 and estimated expenses for 2006 were presented (below). It was noted that the balance is significantly lower than in previous years, but that this is due in a large part to the matching funds for the Excellence in Education Award.

Item	Rev/Exp	Total	Balance	2004
<b>Balance Jan 1, 2005</b>		40,313.51	40,313.51	37,674.88
Revenue				
Dues	15,598.00			
Meetings	2,064.00			
Investment Income	2,598.29			
<b>Revenue</b>		20,260.29	60,573.80	20,817.84
Meeting Expenses				
April A/V	(693.81)			
April Reception & Food	(3,275.26)			
Fee Waivers	(5,400.00)			

April Travel (Malamud, Poston, Bresnahan)	(2,993.17)		
Sorting Travel (Norris)	(912.09)		
AAPT Session CD's	(1,189.76)		
AAPT Invited Speaker Travel	(1,078.39)		
AAPT FED Meeting	(371.57)		
AAPT FED Travel (Lopez, Malamud, Rossing)	(1,519.84)		
<b>Meeting Expenses</b>		(17,433.89)	43,139.91
<b>Mini-Grant Snow</b>		(500.00)	
<b>Mini-Grant Norris</b>		(500.00)	
<b>PER Foundations Conference</b>		(3,000.00)	
<b>Supplies/Postage/Phone</b>		(397.96)	
<b>Printing Lectra Media (Newsletters)</b>		(508.74)	
			38,233.21
Services			
Morrison (Newsletter Ad)	(75.00)		
Pahola (Hodapp)	(2,500.00)		
<b>Services</b>		(2,575.00)	35,658.21
<b>Excellence in Teaching Award</b>		(18,940.60)	16,717.61
<b>Balance</b>			16,717.61

**Projected Expenses 2006**

Item	Rev/Exp	Total	Balance	2005
<b>Balance Jan 1, 2006</b>		16,717.61	16,717.61	40,313.51
Revenue				
Dues	16,312.00			
Meetings	2,000.00			
Investment Income (Jan)	89.36			
<b>Revenue</b>		18,401.36	35,118.97	20,817.84
Estimated Meeting Expenses				
March Reception & Food	(6,000.00)			
March FEd Exec Meeting	(600.00)			
Fee Waivers	(340.00)			
March Travel (Malamud, Lopez, Zimmerman, Mason)	(5,000.00)			
Sorter Travel	(441.61)			
March Newsletter Printing	(375.84)			
<b>Meeting Expenses</b>		(12,757.45)	22,361.52	
<b>Excellence in Teaching Award</b>		(850.00)		
Current Balance			21,511.52	

**Councilor's Report:** Peter presented a report on the roles and activities of the APS Council. The Council is an advisory, not a governing body, and is meant to reflect the diverse constituencies in the APS. For example, Panel on Public Affairs statements are reviewed by the Council.

The APS economics is changing from distribution of paper to distribution of content. This will result in new models for charging and changes in revenue.

The APS name change will not happen because of legal and trademark issues, but the logo has changed to include the word “physics”.

Committee on Committees fills the operating groups in the society. This is a difficult chore. The CoC need to find more people to be active in the APS but currently are not. Most participants come from self-nominations.

**FEd/CoE/Council:** David Meltzer – What is the relation between the Committee on Education and the FEd?

Ramon – FEd leadership serves on the CoE. FEd is a membership unit, elected by members, involved with meetings, awards, etc. The CoE is appointed and deals with policy and operations. FEd gets membership money, CoE can use staff resources.

Ted – The chair of the CoE is being placed on the Policy and Planning Committee to provide more of an education view. This is a temporary (1 year) experiment.

Peter – The CoE is an arm of the Council, appointed by the Council and the President.

David M – Must CoE activities go through the Council?

No, but broad policy statements for the APS must go through the Council. APS policy goes from FEd through CoE, Judy Franz, Panel on Public Affairs, to Council. This can happen in six months. However, FEd can release a statement that doesn't need to go through this chain. It must be clearly from the Forum and not the APS. This might be appropriate for statements that need to be made quickly (although Council can take an electronic vote) or statements that might otherwise not be approved or be significantly changed.

**Programs:** Peggy presented the FEd session lists for the March and April APS meetings. April has 6 sessions with 2 PER sessions. She will make available lists of sessions at the Teacher's Day at the April meeting. Teachers will get free access to non-science research sessions.

David Haase – It would be good for FEd sessions to be over the weekend so that teachers can come.

Ted – Teachers usually don't go to other sessions.

Gay/Peggy – We should work with Ed and Donna to announce FEd sessions and make sure the sessions are coordinated. At the April meeting, public sessions should be over the weekend. It is a problem when Teacher's Day is before the meeting.

#### **Newsletters:**

Ernie - Karen is working on the Spring Newsletter and Ernie is working on the Summer. The summer will highlight education programs in the National Labs. Larry is helping.

Ramon – Will put together an article on Quarknet. Having something from a teacher participating in Quarknet would also be good.

Ernie – There is a standard web format, and a more traditional 2 column pdf for the newsletters.

Ted – The pdf is important because this is what is distributed.

Larry/Ernie – Need a more organized table of contents for all past newsletters. Things are not easily found. Need to be able to search by topics or audience. The format of the newsletter has changed over the years. Some are only pdf. Most hits come through Google rather than the APS.

Ted – The change in the AAPT website should make it easier to find newsletter articles.

Wolfgang – ComPADRE was going to index the FEd Newsletters?

Bruce – The different formats has made this difficult. Connecting directly to articles may be difficult, but possible for some.

David M – Indexing the newsletters should not take a lot of time. He volunteers to work on this. Larry will help.

Ramon/Ernie – We don't have editors or topics for the Fall or Spring newsletters. Editors can be anyone, not just Ex Com members. Editors have fairly free reign to organize the newsletter. Difficulty is in getting articles back and there is some time spent organizing the newsletter and creating the pdf version.

Ted/Ramon – Perhaps there should be a Senior editor and issue editor. Senior editor gets "Letter from the Chair" and other Ex Com issues.

Ernie – Newsletters should be published so that the Spring comes out in time for the April meeting and the Summer comes out in time for the AAPT meeting. The Fall newsletter has less of a deadline.

Ted – Upper division classes would be a good topic for a newsletter. Perhaps this should go into the next Spring newsletter.

Paula – Teaching physics for biology and biophysics would be a good topic. There is a recent Physics Today article about biophysics. She will edit this newsletter. Do this for the Fall.

### **Congressional Letter Writing and Relations:**

Ramon/Ted – CoE met a week ago and recommended education language be included into the letters to Congress. The President needs to approve this language, so it currently isn't there. People should be able to edit their own letters to include education, but this can't be done officially.

There are political issues involved in getting support for education. This should go through the Washington APS office and the Policy and Planning Committee. There is resistance because of the feeling that education will take away money from physics research. We need to be respectful of the policy process. Some statement at FEd sessions encouraging support of education by Congress would be appropriate.

Jack – There needs to be a coherent message going to Congress. Senior people at agencies see education money coming out of research.

Ted – Getting a letter writing campaign going at the summer AAPT would be effective and appropriate. We should make connections to AAPT members. The Washington office should work on connections with the AAPT. There could be a cadre of arm-twisters at the AAPT meeting to get signatures on letters. Ramon and Peggy might be willing to do this.

### **Excellence in Education Award:**

Wolfgang – The \$100,000 award has been funded. An awards committee is needed to be presented to Alan Chodos. CoE has discussed this (Ramon). Next steps are to decide on deadlines and the award process. The goal is to have an award ready for presentation in 2007, and the process announced in the May issue of Physics News.

A good list of candidates (groups and individuals) and a good first awardee is important. Alan will be collecting nominations. We should be sure that this doesn't duplicate AAPT awards. We should look for groups that have not already been recognized, if possible.

The Lounsbery Foundation helped put the award over the top. They would like to see a high school teaching component for the award, but the award wording can't be rewritten. It would be good if this could happen to some extent without re-writing the award.

### **ADS ABS:**

Guenther Eichhorn, Michael Kurtz – This project is an online abstract search service that has been supporting astronomy for 15 years. They desire to provide this service to more audiences, for example PER. They have just started working on including the American Journal of Physics and The Physics Teacher.

Journals can be grouped by topic to limit the search. Search capabilities and the processing of search results are extensive. It can connect, organize, and correlate arXiv materials, journal articles, and conference proceedings.

David M – How does this compare with Science Citation Index?

ADS goes for more depth. They include more conferences, for example. They also try to be very current.

Peter – Is this available now?

It has been running for 15 years. On average, every astronomer uses it every day. This is considered the interface to the Astrophysical Journal.

Wolfgang – How can this help Forum members?

Currently this is set up for the research scientist. Efforts need to be made to encourage pedagogical searches. More education-related materials need to be added and interface development is needed to provide simplified ways to do searches. Most users don't want all the options.

ADS needs a list of education journals and articles.

David M – We could provide a list of journals.

Ted – Marty Bloom thinks this is a great way to get abstracts available for view.

### **APS Meetings:**

Judy Franz – FEd invited sessions at the March and April meeting need to be allocated. The options currently are 3 and 5 or 2 and 6. Changes are possible but the meeting planning needs to begin now.

Discussion – Getting talks at the March meeting is more difficult, but the FEd needs a larger presence there. The Program Chair is able to select sessions as they best fit the meeting. Other

options include focused sessions with one invited talk, or expanding talks in a smaller session (at least for the April meeting).

Judy – There is a crowding issue at the March meetings. Posters sessions are being pushed to remedy this. Focused sessions need to be organized ahead of time by the Program Chair and advertised.

Peggy – Recommend that there be 3 invited sessions in March and 5 in April. This was approved.

#### **Ethics Education Task Force:**

Judy – The report of the APS Ethics Education Task Force is due in April (Note: This is at <http://www.aps.org/statements/loader.cfm?url=/commonspot/security/getfile.cfm&PageID=74196>). This includes case studies available on the web. The desire is to keep this going to continue to emphasize this issue. This may be more available through the updated APS web presence.

Peter/Ramon/Judy – This is important to continue, but don't want to create more committees. Case studies will be very useful, helpful for research centers. The FEd could consider ways to keep this going.

**Society Finances:** Tom McIlrath presented information about the APS financial picture. Education and outreach are important, about \$3M per year. Membership and meetings approximately break even. Revenue comes from publications, about \$30M. Typical is 5-8% return although this has been higher (13-15%) recently.

David M – What is the relative income from paper vs. electronic?

Tom – No extra money is made on paper publications. The extra costs just cover the production and distribution. More subscribers (institutions and individuals) are leaving paper publications, which in turn increases the costs of paper.

The goal is to have an operating loss each year of about 4-5% of the total reserves. The investment income on reserves brings in 7-8%, thus covering inflation and some growth. 2000 and 2001 were bad years, with losses on both publications and investments. Reserves dropped to about \$50M. Reserves have now bounced back to \$67M, above the recent average.

The Units are important for deciding how the money is used. Units control about \$4M.

**Public Outreach:** Jessica Clark shared some of the current public outreach efforts at the APS. These efforts include:

- Physics Central – The APS public outreach site includes rotating features. Physics in Action relates exciting new physics research efforts. People in Physics profiles interesting scientists. Including more minorities and women would be good. Physics in the News relates to physics to current events. More focus will be given to Physics Central now that the World Year of Physics is over.
- Physics Quest – Part of the WYP, this Middle School mystery activity attracted quite a few participants. Winners went to Princeton and got prizes. This will continue this year

with a Ben Franklin theme. Participating classes get a free kit of materials that are very flexible. Kits cost about \$11 each. It might be helpful to get FEd membership to help spread the word about the program and to help teachers using the kits. We need a good way to find appropriate contacts to help on this effort.

- Adopt-a-Physicist – Have physicists serve as mentor for High School classes. The physicist can host a blog, answer questions, and communicate through the web. This will be hosted by ComPADRE. The goal is to provide better communication channels between K-12 students and scientists. FEd members are a good group of potential mentors.

Larry – Kits should be available for teachers to buy after these activities are over.

Jessica – Vendors are doing this. It would be good to keep information about what works well and what doesn't, and why.

### **AAPT Update:**

Dick Peterson – The AAPT board appreciated the FEd/AAPT discussion at the summer meeting and would recommend it continue.

The AAPT has started its first topical group. It is on PER. There are currently 300 members who have paid to join. This is a membership-driven effort.

The AAPT will hold a retreat in June on the future directions for the Association.

The AAPT Executive Officer search is focusing on final candidates.

A task force has been set up to improve the advanced laboratory experience. This is an often neglected topic. Help is needed for people working on these labs to share best practices.

**AAPT Senior Physicist:** Charlie Holbrow is serving as the first AAPT senior physicist. This position was created out of a concern about the lack of AAPT programs and resources supporting four-year college and university faculty. The AAPT needs to bridge K-12 and college/university physics teachers. Efforts underway include:

- Teaching General Relativity to Undergrads – A workshop is planned before the summer AAPT meeting.
- Systemic Change in Teaching Undergrads – This conference of 30 R1 institutions is meant to share and discuss ways of creating real and lasting changes in the undergraduate program. The AAPT is serving as a host.
- Forum of Physics Graduate TA's – A New England group has self-organized to share experiences. The New England APS and AAPT is helping with this.
- 50<sup>th</sup> Anniversary of the PSSC – A series of talks and remembrances of the creation of the PSSC will be hosted at the summer AAPT meeting and published by the AAPT.

### **ComPADRE:**

Bruce – ComPADRE is a joint AAPT/APS/AIP/AAS project to provide resources and services online to communities of physics teachers and students.

### **FEd Sessions at AAPT Meetings:**

Peggy – The DNP will host “Nuclear Physics in the 21<sup>st</sup> Century, A Legacy of Hans Bethe” at the 2006 AAPT summer meeting. The schedule and reception is being organized.

It was suggested that the DCMP host a session at the 2007 AAPT meeting. David and Peggy will discuss this and contact the chair of DCMP. These should be Plenary sessions.

**Gordon Conference:**

Ramon – There will be another GRC on Physics Education and Research this summer, this year on Electricity and Magnetism. There is a request to support this conference similar to the support given last summer to the Foundations in PER conference.

Paula – There have been three of these previously on thermal physics, quantum mechanics, and classical mechanics. These are excellent conferences. Perhaps we can use these conference to line up speakers for the April APS meeting.

Ramon – We can work on this, and also have information from the GRC in a future (perhaps Spring?) newsletter.

Wolfgang – There is a need for more than monetary support. The conference needs at least 100 participants to continue to get support as a Gordon conference. The FEd should send out information to encourage participation.

Discussion – Possible target audiences for participation include four year colleges, plasma physics, SPIE and OSA, and computational physics.

It would be nice to support graduate students and new faculty to encourage attendance by those who might not otherwise be able to attend.

Paula – Move that \$3,000 be provided to the GRC to support graduate students, postdocs, and pre-tenure faculty. The motion passed.

**PTEC Conference:**

Ted – A PTEC (Physics Teacher Education Coalition) conference will be held at the University of Arkansas. 80 attendees have signed up. The PTEC community is growing, but there is still a big need for better teacher preparation in physics departments. 35% of High School Teachers are physics majors or minors. The FEd should continue to emphasize this need.

**PRST-PER:**

This online PER journal is up and running. A dozen articles have come out so far. Interesting material, the FEd Newsletter should highlight this journal.

Ramon/Ted – Articles are being held to high standards. The rejection rate is fairly high. The APS is taking a risk with this journal as it is being supported by page charges. The AAS has done this for years, but it's a bit of a test for the APS.

**APS Web Redesign:**

The redesign of the AAPT web site is under way and will be brought up during the summer and fall. The goal is to better identify resources for possible audiences, including ones not currently served. The FEd needs to determine how our material will connect to the new design. The list of audiences was created by an outside firm.



Discussion – Students are a possible important audience. How can we inspire students to become excited about physics? The current web site is mostly focused on researchers. We also need to connect to other resource providers such as the AAPT.

The FEd needs a group to look at our web presence and how we will connect to the APS. We need to have some influence on the audiences served. The new web hosting should improve content updates. We should connect to the divisions to unify the educational resources of the APS. This will help broaden our audience. We should be a central place for the collection of physics education resources.

**PER Community and the APS:**

The PER community is housed, to a large extent, at larger universities. Physics departments at universities are more connected to the APS. How can this connection be strengthened?

Wolfgang – It’s been suggested that the PERC be connected to an APS meeting.

David M – A straw poll was taken at a meeting of the PER committee at an AAPT conference about alternating the PERC between AAPT summer meetings and an APS meeting. There was some support, perhaps 1/3 of those present voting “yes” or “maybe”, for doing this.

Ramon – The FEd can make this statement independent of the PER poll. The conference should be associated with the APS and PRST-PER.

Jessica/Paula – Is this another case of APS taking over from the AAPT? Not sure how possessive AAPT is of the PERC. Many non-researchers stay for the PERC conference. The AAPT support of the Foundations conference last summer was lukewarm while the APS FEd response was immediate and positive.

Ramon/David – The initial leadership of the PER Topical Group will be in place in a few months. There could be a communication from the FEd that we will work to assist in a topical conference on PER.

Jessica/Wolfgang – There is also the issue that APS meetings are more expensive, but the conference and the cost of living. The conference isn’t an issue because FEd and public sessions are available free for AAPT members. Expense probably isn’t a large factor for PER researchers, but it will be for high school teachers and the more general audience.

**Communications:**

Larry – The FEd needs to host more active, immediate, and controversial communication forums. The discussion needs to be broadened and build the community. Example topics: State assessments that are incorrect; are undergraduates learning what they need; physics education for industry; standards at the undergraduate and levels. The discussion needs to be more dynamic than that provided by the newsletter. Need threaded responses that attach discussions with the newsletter articles.

Ramon – Who is going to provide the content and keep the discussions going? How can this continue?

Discussion – This shouldn't be another email list. A blog is the correct interface, dynamic rather than static, but without loss of content. This could be continuing "Letters to the Editor". A wiki is another possible interface.

The APS probably can't host this. The FEd can start this on a Blog spot and link to it to get it going. One option, anyone on the Ex Comm can post. This could include past Ex Comm members as well. There might need to be a daily update. It should be entertaining. Another option, have guest bloggers to start new discussions. Updates and changes can be announced by email (or RSS feeds). We need to be aware of random posts from "kooks". Professionals will take this seriously.

### **FEd Communications:**

David H – We also need more controlled official communications for the FEd. Have a controlled area for the Ex Comm to continue these discussions. We might have a web page or thread for this, and share the space with the CoE?

Paula – This could be a place to keep the flurry of materials, deadlines, a calendar, etc.

Ernie/Ted – The APS can create a password-protected area for the materials. The Lyris Listserv can be used for this. It includes an archive. Everyone will need to know where the archives reside.

### **Future Meetings:**

Peggy/Ramon – The next meeting will be a teleconference in May or June. It would be good to have calls every two to three months. Whether or not there is a meeting at the Syracuse AAPT meeting will depend on the number of people attending the meeting.

### **Other Business:**

Wolfgang – The FEd should make a long-term commitment to supporting the Physics and Education GRC's.

The Quantum Mechanics workshop at this meeting was a success. 55 people attended and the feedback was positive. The combined a topical session and computation. The FEd sponsored this through a mini-grant and by getting it into the program. A problem arose because there was no registration fee, due to the FEd support, there was also no registration. This should be fixed for future workshops. The hope is to do this again in Denver next year on the topics of Thermodynamics and Stat. Mech.

There should be support for the registration of presenters at Teacher's Day at APS meeting. Ted should be advised of this recommendation. Perhaps the FEd could cover this? The travel costs are too large for participants.

The meeting was closed at 3:40 p.m.