

**APS Forum on Education  
Executive Committee Meeting (teleconference)  
January 4, 2003  
Minutes and Notes by Ernie Malamud**

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***Voting Members Present:*** Wolfgang Christian, Robert Ehrlich, Ken Krane, Ernie Malamud, Richard Robinett, Gay Stewart, Dean Zollman

***Non-voting Members Present:*** Robert Clark (COE), Stan Jones, Thomas Rossing, Fred Stein

***Voting Members Absent:*** Ramon Lopez, Karen Cummings, Paula Heron, Jack Wilson, Pete Zimmerman

***Non-voting Members Absent:*** Charles Holbrow (AAPT President Elect), James Wynne

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Ken called the meeting to order at 8:05 am, PST. A few items were dropped from the proposed agenda (distributed by me on December 28), and the order of other items changed, since some participants could only be present for part of the meeting.

The minutes of the October 19, 2002 meeting (teleconference) were approved.

### **Financial**

Ernie reported that total funds available to the FED as of 11/30/02 are \$26,428.09. This includes revenue of nearly \$8,000 received from APS since our meeting in October. This is our member allocation for the ½ year transition July 1, 2002 to December 31, 2002. APS is changing to Fiscal Year = Calendar Year beginning Jan. 1, 2003. We expect additional revenues from APS of ~ \$15,000 member allocation for 2003. Commitments, which have not yet appeared on our financial report, are newsletter layout (\$300), two teleconferences (about \$1,000 each), and small amounts for postage, office supplies and telephone. Also see action under “Physics on the Road” conference.

Ken led a discussion on ideas for disbursement of funds. Some ideas:

1. Print and mail the newsletter (or some of them).
2. The future APS Education Prize/Award (proposed by COE, Chair of the COE subcommittee is Wolfgang) may be to a department rather than an individual. In that case funds will be needed for site visits. However, in any case this would not be in FY 2003.
3. Seed money for conferences on teacher preparation held during APS and AAPT meetings.

There was discussion on whether or not we should solicit suggestions for using FED funds from our general membership. It was felt that we should proceed cautiously. Another idea is to solicit suggestions from the Education Committees in Divisions/Sections. An appropriate occasion to begin this dialog will be at the Unit Convocation, February 1. Wolfgang, Gay and Ernie will be representing the FED at that meeting.

Ken appointed a budget subcommittee to prepare a 2003 budget and present it at the April Executive Committee meeting. On the subcommittee are Ernie, Tom Rossing, Dean Zollman, + one more person to be appointed by Ken. This subcommittee will also prepare a FED Financial Policy (approval levels) to be presented in April.

### **“Physics on the Road”**

This is an APS Conference on traveling physics experiments and exhibits, February 22-23, 2003 at Colorado State University. The request for \$3,500 from the FED for participant travel expenses in exchange for co-sponsorship of the conference by the FED and for “guest editing” one of our three newsletters was approved.

The Conference budget of \$15,000 (all from APS) was based on a participation of 30. Participation has grown to 50 so additional funds are being sought. Supplementary funding from FEd would cover a participant lunch on Saturday and some lodging. Additional funds may also be forthcoming from AAPT's Bauder Fund.

### **Newsletter**

It was agreed that the Spring 2003 newsletter would be a "theme" issue and be mainly devoted to "proceedings" from the Physics on the Road conference. Fred agreed to supplement the issue with an article(s) on Physics on the Road activities from Science-Technology centers. Also the usual material "From the Chair," etc. will be in the Spring issue. Fred will have APS staff support for layout and editing.

Ernie had previously lined up a few articles for the Spring issue; he will contact those prospective authors and request that they write instead for the Summer issue.

### **Building FEd membership**

From the official APS chart of unit membership FEd membership for CY2003: FEd has 4,056 members. This makes it the 4<sup>th</sup> largest unit after (1) FIAP 5,422; (2) DCMP 5,225 (3) FPS 4,549. DPF is 5<sup>th</sup> at 3,184.

Ken has distributed to the Executive Committee a draft of a letter he will send to "lapsed" members. Ernie will obtain a list of lapsed members.

Ken will also distribute a FEd member solicitation letter to Department Chairs.

Ken sent the Executive Committee a proposed Poster for distribution at APS and AAPT meetings. Dean Zollman will first use this at the winter AAPT meeting.

There was discussion about a mechanism for distributing FEd newsletters at meetings. Needed is a schedule of meetings and who is going to which meeting. FEd can reimburse costs. Go to your local "Kinkos" and then send the bill to Ernie.

Ernie volunteered to distribute newsletters at the April meeting. Who will do it at the March meeting? Dean Zollman is doing it for the Austin AAPT meeting. How about at the Madison AAPT meeting? Wolfgang: it is appropriate for our APS/AAPT Members-At-Large to take responsibility for this.

There was discussion of having a booth at the AAPT meeting. How much would it cost? Problem is not the cost but the effort to staff it during the entire meeting.

### **Program Committee -- Wolfgang**

The FEd sessions for the March and April meetings are set.

The proposal from FEd for having a plenary talk on education was turned down for April 2003. We need to try again for April 2004.

An Open House will be held. It will be Monday evening, April 7, 5 – 7 pm and will be combined with the Business meeting.

Lillian McDermott has been awarded the medal of the International Commission on Physics Education for 2002 (IUPAP commission C-14). Since she will be unable to attend the annual meeting of the commission next summer in Europe there was discussion of finding a slot in the April meeting for presentation to her of this award. Wolfgang suggested scheduling 5 minutes at the beginning of the "Teaching Quantum Mechanics" session.

## APS Council

Ken Krane will contact Pete to ask if there are any Council issues that should be discussed in our Executive Committee. Note: APS Executive Board and Council meeting minutes are available at <http://www.aps.org/exec/minutes/> (password protected).

## FED Election

Gay Stewart reported on nominations. There are 3 (or 4) candidates for each of the three slots; at least one candidate for each slot is not from traditional academia.

Ken Lyons has agreed to run the election as has been done in the past. Ernie had proposed (in the October 19 meeting) to use the APS for the election and was surprised to learn recently that APS does not provide a modern vote tallying system to the APS units. So we are grateful to Ken that he can continue to provide this service to the FED. There will be a few paper ballots (people whose email bounces or don't have email – list of Jan. 9 shows 143 FED members without email) and Ernie will add these manually to the tallies that Ken provides.

## Fellowship Committee

Fellows will receive awards in April at our April 7 Open House/Business Meeting.

The timeline for 2004 (message from Ken January 6):

- Nominations due at APS (for FED nominations): April 15
- Recommendations of FED Fellowship Committee to APS: July 1 (Chair is now Jack Wilson; will change to Ken in April)
- Recommendations by APS fellowship committee: September 1

There was a discussion on how to solicit candidates for APS Fellow.

- Send a solicitation to Department Chairs.
- Ken has gone through the FED membership list (in the APS Directory) and found some obvious people that he feels should be Fellows. Ken asks other Executive Committee members to do the same; he will also ask several past chairs to see if some of these were not passed on for some reason.
- AAPT has an Awards and Nomination Committee – they could pass names on to FED Fellowship Committee.

## Building Bridges between the AAPT and the APS

FED presence at August 2 - 6 AAPT National Meeting, Madison, WI.

- Hold a FED Executive Committee meeting during Madison meeting – there was not much enthusiasm for doing this.
- Host a “cracker barrel” session including refreshments. This could be focused on a particular topic, e.g. “integrating research and education.” Have a few people lead it off, each for 5 – 10 minutes, relating experience (case studies, anecdotes) of involving undergraduates in research. Wolfgang was concerned that we are stepping on the toes of the AAPT committee that deals with this subject. He suggested instead that we aim the cracker barrel session at high school teachers. Have APS members to represent each Division and bring curriculum materials from that Division with them. Ken Krane will follow-up with AAPT to see if this can be put on the program for the Madison meeting. It was suggested that we ask AAPT to offer one free registration for each of the APS divisions. This idea will bring in participation from the Division Education Committees.

Tom Rossing felt it is more appropriate for the Forum to do this at the AAPT winter meeting. The AAPT winter meeting will be January 24 – 28, 2004 in Miami. There are more APS members at the winter meeting than at the AAPT summer meeting.

### **Education Prize/Award**

COE is still discussing this. Send ideas and comments to Wolfgang.

### **Webpage**

Not discussed. However, we do need to decide what to do with our FEd member survey. (Ernie is discussing this with Jim Wynne – comments welcome!).

### **New Business**

Ken sent the following outline on Dec. 30 for discussion: Promoting Education Sessions at APS Meetings: coordination with unit program chairs and education committees, developing and circulating "model" session programs that have been successful, seeking additional program slots at other divisional meetings, development of speakers list similar to women and minorities lists (also useful to departments wishing to invite colloquium speakers on education topics) One of the issues is who does this? Our program committee already has lots to do. Ken will move this along and come up with a plan.

Ken also sent several status updates which have been attached to the minutes. See attachment list.

### **Status of FEd participation in the State STEM Education Coalition**

ASME initiated this. Ken will contact Judy to find out status.

### **APS/IBM Research Internship Program for Undergraduate Women**

A request was made to FEd to send the announcement of this program to the FEd membership. Consensus after discussion was that although this is a worthwhile program it is only one of many intern programs and it didn't seem appropriate to send the announcement to our full membership.

### **Teacher Licensure Subcommittee** (Subcommittee: Rick and Karen)

This will be on agenda for our April meeting. Need to begin with a few states that become a model. A good example might be Michael Marder, University of Texas in Austin. (512-471-3612)

### **Next Executive Committee Meeting**

The next face-to-face Executive Committee Meeting (and the FEd Business Meeting) will be during the April APS meeting in Philadelphia on Monday, April 7.

The meeting was adjourned at 10:03 am PST.

### **ATTACHMENTS**

- 1. Physics for Everyone**
- 2. APS/AAPT Session Exchange**
- 3. New Faculty Workshop**
- 4. National Task Force on Undergraduate Physics (NTFUP)**

## **Physics for Everyone**

The following statement was approved by the COE at its September 2002 meeting:

The American Physical Society was founded to support "the advancement and diffusion of the knowledge of physics." In keeping with this goal, the Society supports the aim of having all students study physics. In the elementary and middle school grades, physical principles and ideas should be an integral part of science learning and should be approached through activities intended to help students appreciate these ideas at a level appropriate to their development. At the high school level, every student should take a program of laboratory science courses that includes physics. A primary goal of the teacher should be that all students understand the central ideas of the subject and appreciate the role these ideas play in the world around them. The knowledge of physics is fundamental for the understanding of chemical and biological processes and is essential for decision-making in a technological society. Demonstrated success in increasing the number of students studying physics has been shown in schools that have implemented a program placing physics at the beginning of a three-year science program. The improvement of the teaching and learning of physics requires programs that support teachers, offering opportunities for them to improve their knowledge and skill in teaching this subject area and providing them with teaching materials and resources appropriate for this task.

## **New Faculty Workshop**

The 7<sup>th</sup> workshop was held in November 2002 with about 80 faculty participating. Unfortunately it was necessary to turn away about 20 additional applicants due to lack of space. We are currently investigating models that will allow us to accommodate a larger number of participants in a single workshop that still allows for informal interactions among the participants and between participants and discussion leaders.

A “reunion” meeting of former NFW participants is being held on the Sunday before the March meeting. About 45 people have applied to attend. The NSF grant will pay about \$500 per person toward air fare and one night of lodging. Carl Wieman will be the keynote speaker.

## **APS/AAPT session exchange**

Pursuant to our discussions during the previous virtual meeting, the following announcement was distributed to AAPT members:

AAPT members can attend, free of charge, the sessions sponsored by the Forum on Education at the April 2003 APS meeting in Philadelphia, PA, April 5-8, 2003. Go to <http://www.aps.org/meet/APR03> for general information on this meeting.

APS members can attend, free of charge, the three plenary sessions at the January 2003 AAPT meeting in Austin, TX. To take advantage of this opportunity, just stop by the onsite AAPT registration desk in Austin and pick up a complimentary pass. To get more information, go to <http://oliver.aapt.org/meetings/126th/scheduler>. Just type "plenary" into the keyword search box labeled "rest of program" to pull up the session

## **National Task Force on Undergraduate Physics**

The final report on project SPIN-UP, including summaries of the 21 successful site visits and of the survey report representing 560 physics departments, is currently in its final draft and should be released soon.

A NTFUP meeting was held in December at the ExxonMobil headquarters in Dallas, Texas. Ten representatives of the Black and Hispanic physics communities were invited to join the meeting to discuss minority issues affecting undergraduate programs. Some additional site visits to departments with large minority enrollments are currently being planned.

Two conferences are in the planning stages: a second meeting of the chairs of the “elite” departments (organized by Paul Leath of Rutgers, to be held in April 2003) and a conference on the calculus-based introductory course (chaired by Bob Beichner and Ramon Lopez, tentatively set for October 2003).

Given the depletion of the funds from the current ExxonMobil grant that supported project SPIN-UP and the up-tick in physics baccalaureate degrees in the past 2 years, the Task Force is debating whether to declare victory and disband or to seek funding for new projects.