

# Meeting of the Executive Committee of the DPF

**December 19, 1997**

**Present:** Bagger, Beier, Burchat, Devlin, Frisch, Georgi, Gordon, Grannis, Kinoshita, Naples, Newman-Holmes, Rutherford, Schellman

**Guests:** B. Barnett, T. McIlrath, R. Peccei, J. Sandweiss

## **Agenda:**

1. [Report of the Chair](#)
2. [Report of the Secretary-Treasurer](#)
3. [Report of the APS Treasurer](#)
4. [Congressional Reception](#)
5. [Report on OSTP and OMB Visit](#)
6. [APS Council Report](#)
7. [Physical Review Letters](#)
8. [DPF 99](#)
9. [DPF 2000/2001](#)
10. [April Meeting](#)
11. [Education and Outreach](#)
12. [Tanaka Prize](#)
13. [APS Centennial](#)
14. [Prize for Technical Contributions](#)
15. [Phenomenology in the U.S.](#)
16. [FNAL Director Search](#)
17. [DPF Committees](#)

For more on these items, see the DPF home page, <http://www.aps.org/units/dpf/>.

---

## **Report of the Chair**

Paul Grannis introduced the new members of the Executive Committee and thanked the people who are retiring. He announced that Bruce Barnett of Johns Hopkins will begin a three-year term as organizer of the DPF Congressional Reception, and that Bob Cahn of LBNL will take over as Public Information Coordinator. Grannis also reminded the Executive Committee that Gene Beier will replace Frank Sciulli as the DPF representative on ICFA.

## **Report of the Secretary-Treasurer**

As of November 1, 1997, the DPF account balance stood at \$86,274. The prize account balances stood as follows: Panofsky, \$64,103; Sakurai, \$174,053; Wilson, \$107,697.

The Panofsky Prize Fund remains significantly underendowed. Howard Georgi will take over the fund raising effort. Howard Gordon and Pat Burchat have volunteered to help.

## **Report of the APS Treasurer**

Tom McIlrath presented a positive report on APS finances. He stated that in FY97, a \$1.6 M operations surplus and a \$9 M return on investments have contributed to a net balance of \$49 M in unrestricted assets. This corresponds to about 150% the annual expenses of the Society.

During the next three years, the Society anticipates spending \$2.5 M on an expansion of its publication facility at Ridge, and \$4.0 - \$4.25 M on activities associated with the APS Centennial. It hopes to recover all but \$1.0 - \$1.25 M from outside sponsors.

McIlrath reminded the Executive Committee that the APS publications account for approximately 85% of the total APS budget. At present, there are about 12,000 institutional subscriptions to APS journals. This number has been dropping for quite some time by 3% per year. The number of member subscriptions has been falling more rapidly, at about 10% per year. However, the member subscriptions are provided at cost, so the drop in these subscriptions does not affect on the overall financial picture.

The APS journals are now all on line. Physical Review D has moved to an "e-first" mode. Most papers are now on the web within 24 hours of acceptance. They are later collected and bound into paper journals. Because of this, a new type of pagination will be implemented starting July 1, 1998. For more information, see <http://publish.aps.org/PRD/prdhome.html>.

The APS has adopted a new copyright form, which will leave all rights for noncommercial use with the authors. The form can be viewed at [ftp://aps.org/pub/jrnls/copy\\_trnsfr.asc](ftp://aps.org/pub/jrnls/copy_trnsfr.asc).

The Physical Review On-Line Archive will be available in early 1998. It will contain articles back to 1985. It will initially be offered as a free add-on to institutional subscribers.

The Physical Review will introduce a new, all electronic section, entitled Physical Review: Special Topics. The first special topic will be accelerator and beam physics.

McIlrath requested that he be sent any comments or suggestions on how to approach the costing of journals in the electronic era.

## **Congressional Reception**

Bruce Barnett reviewed plans for the APS Congressional Reception. He proposed that the date be set for May 5, 1998.

## **Report on OSTP and OMB Visit**

On November 11, 1997, Jon Bagger, Paul Grannis and Michael Witherell met for nearly an hour and a half with Bev Hartline of OSTP (Assistant Director, Physical Sciences and Engineering) and Gary Bennethum of OMB to make case for facility utilization in the FY99 budget. Bagger reported on the following points:

Bennethum and Hartline raised the utilization issue themselves. They had a good grasp of the facilities that are coming on line.

Bennethum stated, and reiterated later, his belief that the primary justification of HEP has to be the knowledge that derives from the research. The technical paybacks to society have to be made known, but do not constitute the main justification.

Hartline and Bennethum pointed out that basic research is properly the function of government, and is what government does well. There is resonance with this point of view in the Administration and in Congress.

Bennethum partitioned DOE activities as follows: Defense and Waste Cleanup, Energy and Environmental Research, and Basic Research. He felt that the priority of High Energy and Nuclear Physics should continually be pressed within DOE and the administration.

Hartline asked twice how one justifies \$1 B for High Energy and Nuclear Physics. She said everyone agrees that it should be funded. The only question is the level.

## **APS Council Report**

Henry Frisch (and George Trilling by e-mail) reported on the latest meeting of the APS Council. He noted that Beverly Berger, Roberto Peccei, and Helen Quinn were elected General Councillors of the APS. He also reported that several DPF members were appointed to APS committees: Executive Board: George Trilling; Committee on Committees: George Trilling; Publications Oversight Committee: Virginia Trimble; Members of POPA: John G. Cramer, Marc Sher.

Frisch also reported on the successful conclusion of the Campaign for Physics. Over \$5 M was raised in support of programs to improve K-12 science instruction. The largest single contribution (\$1.2 M) came from George Soros. About \$500 K was raised from individuals, mostly members of the APS.

Finally, Frisch remarked that the APS has appointed a Task Force on Physics Today which will evaluate the content and style of the magazine. The Chair of the Task Force is Burton Richter of SLAC. He invites comments and suggestions at [brichter@slac.stanford.edu](mailto:brichter@slac.stanford.edu).

## **Physical Review Letters**

Jack Sandweiss pointed out that within ten years, a typical article from an LHC experiment will have at least 1500 authors. He explained that -- even today -- he thinks

that long author lists hurt our field. They lead to an over-reliance on recommendations in the hiring process, and they give the impression that there is little room for individual initiative. In the LHC era, he felt that long author lists will look ridiculous.

Sandweiss said that he could envision several solutions to this problem. Some would be cosmetic, such as listing the collaboration and the spokesman, or the collaboration and a corresponding author, with the full author list available by hyperlink. Other solutions would be more radical, such as only listing those physicists involved in an analysis, or only listing those physicists who are members of a particular subgroup.

Sandweiss emphasized that a change of this magnitude could not be imposed by a journal such as PRL. He felt that it must come from the community.

Paul Grannis replied that he had polled the major collaborations on this question. He received replies from DELPHI, OPAL, ZEUS, SLD, CDF, DO, CMS, ATLAS, PHENIX, CLEO and E665. The responses were uniform: the collaborations did not want to create shorter lists. The collaborations felt that it is necessary to recognize the people who do the essential work on the detector and the software systems as well as the ones who carry out the analyses. They also felt that such a dramatic change would tear at the spirit of collaboration. (Some collaborations thought it might, however, be possible to identify a corresponding author for each article.)

Sandweiss encouraged the Executive Committee to think more about this problem. He felt that change must originate from the grass roots, and that the DPF has an important leadership role as the only elected voice of the community.

## **DPF 99**

Roberto Peccei reported on DPF 99, which will be held January 6-9, 1999, at UCLA. Registration will be the day before. Peccei chairs the Local Organizing Committee, together with David Cline. The Committee involves representatives from UCLA, UCI, Caltech, USC, UCSD, UCR, UCSB.

Peccei anticipated that DPF 99 will have a \$275 registration fee, with \$100 for students. These fees will rise to \$325 and \$150 after December 11. The registration fee will include four lunches and a banquet. The proceedings will be electronic only.

Peccei proposed that the conference have two days each of plenary and parallel sessions. He will seek suggestions for the program from the Executive Committee via email.

He also discussed possible evening sessions on outreach and on political action.

The conference web site will be <http://www.physics.ucla.edu/dpf99/>.

## **DPF 2000/2001**

The Executive Committee has received two inquiries for conferences in the 2000-2001 time frame. Howard Georgi will work with the EC and the potential hosts so that a decision can be made during the UCLA meeting.

## **April Meeting**

Howard Gordon reviewed plans for the April meeting. (The schedule of DPF invited sessions had been previously circulated by email. It is available on the web, at [http://www.aps.org/units/dpf/april98/.](http://www.aps.org/units/dpf/april98/))

This year there will be a change in the format of the meeting. Each morning will feature one special plenary session featuring three talks of broad interest to physicists in all fields. These sessions were installed by DPF urging to help broaden the appeal of the meeting, and which we hope will encourage more attendance.

The EC discussed the abysmal attendance at the DPF Business Meeting. It was suggested that the Fellowships be awarded before the Prize talks, and not afterwards.

Paul Grannis discussed a proposal from APS to move the April meeting to the autumn. After a brief discussion, a show of hands indicated a slight preference towards leaving things as they are.

## **Education and Outreach**

The DPF has posted a web page, prepared by Michael Barnett, on education and outreach. This site, <http://www.aps.org/units/dpf/education.html>, contains links to many other educational pages. If you know of an interesting site that is not listed, please contact Cathy Newman-Holmes.

## **Tanaka Prize**

Howard Georgi discussed the proposal for a prize to honor M. Tanaka, who died in a 1997 car accident. After some discussion, the Executive Committee decided that a DPF thesis award might be appropriate. Georgi was encouraged to explore this possibility.

## **APS Centennial**

The APS Centennial meeting will be held in Atlanta in March, 1999. This will replace the April meeting that year. All APS units, including the DPF, will have special exhibitions, aimed at the public, highlighting their field of physics.

The Executive Committee discussed ideas for the DPF exhibit. One possibility was to have a wall of cartoons about particle physics. Another was to have a set of computers running The Particle Adventure. A third was to bring a collection of historical material from Fermilab (and elsewhere).

Ideas and suggestions are needed! Please send them to Howard Georgi or Gene Beier.

## **Prize for Technical Contributions**

It has been suggested that the DPF offer a prize for technical contributions by young experimentalists. The idea would be to highlight the technical contributions that are at the heart of HEP experiments. The proposed prize would enable the recipient to travel to a conference; it would be funded by grants from NSF and DOE.

Paul Grannis, Heidi Schellman and Tom Devlin volunteered to prepare a proposal on behalf of the DPF. They ask that the Executive Committee send them possible prize names, suggested procedures, and ideas for the prize itself. They also ask for examples of the types of contributions which might have merited an award in years past.

## **Phenomenology in the U.S.**

A proposal was brought to the DPF to consider the issue of the support for phenomenology in the US program. There are those who feel that this support and the level of interaction between theory and experiment in the U.S. is less than that found in Europe. The evidence for this is not wholly quantitative, but the programs at CERN to develop the physics issues and techniques for making incisive analysis of experiment for the precision electroweak tests at LEP, development of the supersymmetry phenomenology related to LEP, and studies of QCD were cited. The DPF was asked to lend what support it could to the increase in activity at this interface between experiment and theory.

Discussion noted at the outset that the DPF has little place in specific advocacy of one element of U.S. HEP over others. Paul Grannis noted that in 1990, a panel chaired by Roberto Peccei considered these issues and made several useful recommendations:

- Willingness to give strong consideration to phenomenological collaboration proposals by DOE and NSF;
- Encouragement of special schools addressing the interface of theory and experiment;
- Enhanced funding for theoretical students, and collaborative funding arrangements by experimental groups;
- Encouragement of workshops on future physics by national labs, and support of phenomenology visitors;
- Support for a reasonable fraction of permanent jobs for theorists working closely with experimentalists.

These still seem valid today, and could be reiterated. Discussion also noted that much of the lead in organizing fruitful interactions between the experimental program and theory has traditionally come from the laboratories, with close participation of the lab theory groups. There have been several initiatives in the past couple of years at the labs which

seem quite productive. Several members of the Executive Committee also pointed to productive initiatives organized by university theorists, and the stimulating roles played by general workshops such as Snowmass.

The general sense of the discussion is that this interaction between theory and experiment is worth nurturing and stimulating, but that on the basis of the facts before us, it is not clear that it is in bad shape. The DPF role here should not be too strong, but a letter commending activities such as workshops and working groups to develop new techniques for confronting theory with data would be appropriate, and perhaps helpful. The Executive Committee thought that this letter might be sent to the laboratories, via the theory group heads, and printed in a forthcoming DPF newsletter to reach the wider community. Paul Grannis will draft a letter to stimulate further discussion by the EC.

### **FNAL Director Search**

The Executive Committee discussed the upcoming search for a new Director of Fermilab. Paul Grannis will be attending a meeting of the URA Board of Overseers on February 27. He will again emphasize the importance of the search to the whole community of high energy physicists. He welcomes more specific suggestions on the points to raise at the BOO meeting. He expects the discussion to range over the issues confronting the field, the role of the Fermilab director, the general character of Fermilab's program, and the nature of the search committee.

### **DPF Committees**

The Executive Committee discussed suggestions for the members of the DPF Nominating and Prize Committees.