

DRAFT Minutes of FPS 2015 Executive Committee Meeting (pp. 1-4)

April 12 2015, 8:00 am to 9:30 am

Followed by

DRAFT Minutes of FPS 2015 Business Meeting (pp: 5-9)

9:30-10:00

Thurgood Marshall Ballroom, Baltimore Convention Center

Attendees: In Person: [Usha Mallik](#), [Elizabeth \(Betsy\) Beise](#), [Ruth Howes](#), [Micah Lowenthal](#), [Arian Pregoner](#), [Valerie Thomas](#), [Michael Tuts](#), [Tina Kaarsberg](#)
By phone: [Allen Sessoms](#), [Anna Quider](#), [Beverly Hartline](#), [Phil Taylor](#), and [Lowell Brown](#) **Not attending:** [Andrew Zwicker](#), [Joan Cartier](#), and [Matthew Parsons](#).

After confirming attendees in person and on the phone and welcoming newly elected Executive Committee members (Beise, Sessoms, and Quider), Chair Micah Lowenthal then reviewed and approved the minutes of last FPS Executive Committee Meeting in Savannah.

Chair's overview

Micah looked back on the last year and discussed what worked and what didn't, and he requested ideas for 2015 and beyond.

Regarding the FPS-sponsored program and short courses, he noted that sessions at the meetings ranged in attendance from a few dozen people at his sessions to nearly two hundred, with standing room only at some of Arian Pregoner's sessions. He credited Arian with proposing topics of general interest and finding great speakers. E-mail reminders to the FPS membership also help. The short courses are excellent and attract a lot of interest, although they have to come from the initiative of the organizers. The committee had a brief discussion of the need to encourage FPS members to propose sessions and organize short courses.

The Awards committee did well in 2015, finding excellent nominees for the awards. However, we did not do so well on Fellowship nominations (e.g. there were no fellowship nominations from FPS in 2014). This year, elections were held months earlier and candidates were notified of the results before January 1 for the first time in several years. The winners were also given a brief description of the expectations of the positions, thus giving the newly elected members of the chair line more time to understand their responsibilities before committee deadlines. Credit for the elections is due to Dick Rowberg as chair of the nominating committee along with the members of the nomination committee, and to Tina Kaarsberg as secretary/treasurer, who arranged the election, which had record participation.

Program Chair Update

Incoming Chair Arian Pregoner discussed her experience as Program Chair and invited suggestions for 2016 meetings. The biggest issue with organizing panels for sessions at APS meeting is identifying the right and then recruiting them. Ruth

Howes emphasized the need for more information regarding responsibilities. Some of the guidance is found in the [FPS Bylaws](#) and the [APS unit Handbook](#), but much of what the Forum officers have to do (e.g. work on Awards) is not described in these documents. These should be somewhere in a [Best Practices](#) document. Ruth said incoming Ex Comm need to know this right away because people need lead time to fulfill responsibilities such as recruiting FPS Fellows. Tina suggests that responsibilities and deadlines of each member of the chair line be clearly communicated by the the Nominating Committee Chair to all candidates for election as part of the recruitment effort. This ensures that in deciding to run, candidates can consider a specific schedule of activities and plan for it. Arian also urged that FPS do more co-chairing—and more active co-chairing and include cosponsoring-how-to in the Best Practices document. For example, Arian’s session with FIAP on additive manufacturing at the March meeting fit in well with other FIAP advanced manufacturing efforts. Everyone expressed appreciation for the Arian’s efforts to implement last year’s idea (from Valerie Thomas) to consolidate FPS sessions into one or two days and to hold the ExComm and business meetings back-to-back on Sunday morning of the April meeting. In summary, both the March and the April panels (so far) had gone well. The ExComm (and later the Business Meeting participants) all had many new ideas. A list is provided at the end of these minutes.

NEW Business: New College Curricula for prospective High School Physics

Teachers Ruth notes that most universities are not producing high school physics teachers. But those choosing to teach high school often are strongly interested in societal issues. One solution, she said was to expand the college physics curriculum to include impacts of physics on society as we’ve done in Physics and Society sessions at meetings. She suggests we work with [Teach for America](#) and/or the [Urban Teacher Residency](#) to turn the past two years of FPS sessions into physics curriculum. No volunteer to do this has been identified.

NEW Business: Forum Study Groups

Ruth introduced Forum Study Groups as a possible new FPS initiative. This is based on a successful program first run more than two decades ago that benefitted among others outgoing Past Chair Valerie Thomas. It starts with topic selection: the ExComm selects five diverse Physics and Society topics of interest. These topics are then sent out in a call for people interested in these topics to write a research paper. Writers of the best papers are then invited to a research conference with FPS paying for travel expenses. (This is the major cost of the effort). Ruth said that early career people would need all their expenses paid because they are broke. Beverly Hartline agreed that early career types don’t have any money. Advantages of Ruth’s idea (see Attachment on pp 9-10) include recruiting new people to the FPS area; exploring new topics for FPS; and providing outstanding networking and meeting possibilities for talented newcomers with top people in FPS. Micah says they have the money to do this as there are no other FPS events workshops/schools this year. We also can ask the APS for more money as we are the second largest Forum. Anna suggests that since we are getting more physicists involved in “broader impacts” that the National Science Foundation might chip in. FPSMicah asks Anna to send

examples of conferences. Her list includes topics [at the intersection of science/physics and society](#) for which we may want to consider [sponsoring a physicist cohort](#). Ruth emphasized that she does not want a traditional conference of passive spectators. “People are more engaged when they are asked to do something.” and so she wants to avoid associating this meeting with a more traditional meeting. Usha Mallik supports this idea but says we should think through the implementation very carefully. It must be a success or it does more damage. Tina asks why we limit it only to young, early career physicists, for example, Art Rosenfeld was well beyond early career when he started work on energy efficiency.

NEW Business—other ways to recruit FPS people

Arian—what about a contributed session? Ruth—have the contributed session on the last day of the Study Group Meeting?. There could be a product—Valerie remembered a book from her Study Group Experience. Although some expressed that publications are helpful, Arian doubted whether such FPS publications help many junior scientists get tenure. She suggests CSWP professional skills development workshops as a possible model. Ruth prefers a format where people to have to SUBMIT something. If you want to be part of the FPS field, you have to pay your dues. Valerie praises FPS short courses but notes they are a bit too much senior people giving talks and junior people listening. She said her suggestion to add a poster contest helped one of her students get a postdoc about in the poster topic area.

Secretary/Treasurer’s report

Treasurer Tina Kaarsberg said that finally in her second year she understood the APS accounting system, but that to do so, she had interviewed various APS staff and obtained files going back to 2010. So there would be some surprises compared to her first report in 2014. NOTE: all figures are rounded to the nearest thousand dollars. The first surprise was that the \$50,000 unit ‘retained budget’ threshold above which the APS holds back the unit’s annual dues allotment is not for a single year but **three** years. The second surprise was that for the years 2011 and 2012, the APS had *held back* dues from the Forum. This was likely because in 2011& 2012 the three year average of 2008 (N/A) 2009 (N/A), 2010 (\$76,000) and 2011 (\$45,000) averaged above \$50,000. Since 2011, the FPS has done a good job at reducing its balance where at the beginning of 2015 when the FPS had only \$18,000 in retained earnings for a total of about **\$38,000** for the rest of 2015. (Update: As of 5/20/2014, we spent ~\$3,000 in March and \$9,000 in April (so far) leaving roughly ~**\$25,000** for everything else. For comparison in 2014 we earned about \$25,000--counting \$20,000 in “dues”, \$1,600 in investment income and the rest from APS meeting and event registrations. We spent \$27,000. Surprise 3 is the apparent dwindling endowments: Our Szilard and Burton endowments appeared to total \$145,000 and \$92,000 respectively in 2014. In 2014, for example, Szilard earned just over \$1000 (implies earning 0.7% interest), but paid out \$5000 (we’d need to earn >3.4% interest to cover this without dipping into principal). Similarly, Burton earned \$800, but paid out \$3000. It appears that a combination of increased awards and travel combined with superlow interest rates means that we are rapidly eating

into our principal. Micah noted that the formula used for funding the forums is a default number and FPS has a strong case for asking the APS treasurer for more funds based on its large membership and the ambitious and well attended programs it organizes.

9:30 Adjourn

Minutes of **2015 FPS Business Meeting** [open to all FPS Members] (pp. 5-8 + 9-11)
April 12 2015, 9:00 am to 10:00
Thurgood Marshall Ballroom, Baltimore Convention Center

Attendance: FPS members (many of whom were former FPS chairs) began to appear including: Tony Fainberg, Al Sapirstein, Peter Zimmerman and [Matthew Parsons](#) (social media/newsletter etc. for FPS). The entire ExComm remained for the Business Meeting: **In Person:** [Usha Mallik](#), [Elizabeth \(Betsy\) Beise](#), [Ruth Howes](#), [Micah Lowenthal](#), [Arian Pregoner](#), [Valerie Thomas](#), [Michael Tuts](#), [Tina Kaarsberg](#)
By phone: [Allen Sessoms](#), [Anna Quider](#), [Beverly Hartline](#), [Phil Taylor](#), and [Lowell Brown](#).

Welcome: Outgoing Chair Micah Lowenthal explained that the idea to have the Executive Committee immediately followed by the Business Meeting (Former Past Chair Valerie Thomas idea) is our strategy for being able to provide some refreshments for interested FPS members as well as access to the entire Executive Committee. In this case, public elements of the ExComm meeting (e.g. 2016 program discussion and 2015 election report) would be completed during the Business Meeting.

2016 Chair Line Transfer: Micah formally turned the meeting over to the Incoming Chair Arian Pregoner and everyone else in the Chair line also changed titles (Past-Chair to FPS member, Chair to past-Chair, vice chair to Chair-elect and VC election winner to Vice Chair with MAL and S/T unchanged.)

Szilard and Burton/Forum Award and other Fundraising: Chair Arian Pregoner asks for the confirmation of Treasurer Tina Kaarsberg's finding on the disparity between the award's endowment earnings and expenditures—even if we only give the award part, we would still have a deficit. Tina confirmed that the Szilard award appeared to earn only \$1000 per year while the award (\$3000) and the awardee travel (\$2000) amounted to \$5000 per year. Beverly Hartline said she didn't think that's how the award expenditures worked. Tina replied that over time, it could be a real problem. Micah said that his first preference is going back to APS for [award and curriculum and Forum Study Group] funding.] He emphasized that we are second largest unit and we do more invited sessions than any of the others—that's why we need to have and spend more money. APS benefits from all the FPS activities. Tina said we also should consider how to lower costs and work with APS to manage it. She also noted that APS has offered to help with fundraising for prizes and said we should take them up on it and professionalize our fundraising for both prizes and other initiatives.

APS Council Representative Lowell Brown urged the FPS to provide a boost for APS's [PhysTEC](#) initiative (physics teacher's curriculum) to increase the physics teachers with degrees in physics. He noted this was a topic of considerable discussion in the Council meeting and thought that our involvement could generate more enthusiasm for physics on the part of potential high school science teachers.

Micah reminded us of Lowell's earlier email about the Council meeting that suggested that we support this APS effort on high school physics teachers. Ruth noted that in many cases it's not possible for a person with a degree in physics, but not in education to be a (public) high school physics teacher. Al Sapirstein said that universities are not producing high school physics teachers. Lowell then noted fewer than half of high school physics teachers have even a minor in physics. Lowell says this is different from the Forum on education work, which is a topical, not a career focus. Betsy Beise countered that Forum on Education (FOE) worries about both and also coordinates with AAPT. Ruth suggests a meeting with FOE about teaching physics at the high school level. Anna notes that when she was finishing her bachelor's degree in 2007 that teaching high school physics never was mentioned as a possible career path. "If you are a talented researcher, why stoop to being a physics teacher." Micah says that this could become a session. Arian tasked Tina to determine how much more we would need to start new initiatives use as grants for early career physicists and high school physics teachers as well as for more sustainable awards. Al suggested that the FPS generate materials for freshman year physics courses that emphasize physics and society. He said freshman physics courses are standard –and they all lack any mention of the impact of physics and society. Ruth notes we could incorporate this into her Issue Forum initiative with the freshman curriculum as one of the issues.

FPS APS Panel on Public Affairs (POPA) Representative Phil Taylor reported that the [big discussion](#) at POPA was on their [latest revision](#) of the [APS Climate Change statement](#). There was some criticism of the lack of balance on the panel (and workshop) and also on the lack of outreach. The background since 2007 is on the website. POPA also suggested that APS consider doing its own carbon audit. Phil emphasizes that the FPS Representative is the ONLY member of POPA elected by the membership and the rest of POPA tends to be quite senior and conservative. Micah notes that we have stayed away from climate change events while POPA worked on the statement. There was strong sense that FPS should do something on the revised statement—perhaps include POPA climate change comment in the newsletter and/or a program.

Election Report: Tina Kaarsberg, the 2015 FPS election coordinator, reported on the fall 2014 election. She received 38 paper ballots and 1,081 electronic ballots. Given that the Forum has 5,583 members with email addresses, this is a best-ever electronic "turnout rate" of 19.6% (The highest rate since 1995 when the first electronic ballots was instituted and the response rate was nearly 18%). Tina reiterated her strong support of paper ballots because in the VC race, the difference between the candidates was in the single digits. Micah suggested that the higher participation may be related to moving the election up to coincide with the APS Constitution vote as well as national and other elections. Nominations Chair will be Dick Rowberg again this year and a new person next year. (Pending APS approval).

Program Panel Ideas: All of the ideas, including those first presented by Ruth in are combined below in chronological order. Arian notes that we are only in the idea

solicitation stage. Anna asked what the goals of our sessions are. Is it 1) to be informational, 2) to encourage a dialog, or 3) to accomplish a lot of specific things? Arian said yes—the whole list. Micah said we don't have a single sound bite. Arian says that the goal is to encourage people to think about the broader impact of their fields. Beverly Hartline said it also was to encourage people to get more engaged. Ruth said she sees a major function is to get reliable information and data as well as do some outreach.

Incoming Program Chair Ruth Howes notes that we have 3 sessions for the March Meeting with 5 speakers/session and 4 plus an awards session for April for a total of 7 plus any joint sessions. The APS March Meeting is March 14-18, 2016 in Baltimore, MD and the APS April Meeting is in April 16-19, 2016 in Salt Lake City, Utah.

1. **Evidence for Anthropogenic Climate Change** (Tony Fainberg). Phil reminds us that POPA is issuing a statement on Climate Change, which we need to take into account. Others suggested that there is not enough new in this area to warrant a session.
2. **US/Iran Nuclear Deal** (depending on its success or failure) (Micah). If the deal is a failure, could have a session on the NPT or some other nonproliferation topic.
3. **Physics of Cancer** for the March meeting (Arian)
4. **Physics and Education Policy** probably joint with FOE. It is unclear, however, whether we need to do a session or whether FPS might just need to help out on an FOEP matter. (Lowell)
5. **Measures to respond to extreme weather and other disasters** (Tina) for April.
6. **History of nuclear weapons storage** (Peter)
7. **Research on New Weapons** (drones, cyber warfare, etc.) (Ruth)
8. **Rhetoric of Science** (or Politicization of Science), joint with History of Physics? (Anna Quider)
9. **Discrepancies between Public and Scientific Perceptions of New Ideas:** what is needed for the public to accept new ideas. (Al Sapirstein) (joint with History of Physics?)

10. The **California Drought** (How can physics help us understand the weather patterns that produce the drought, monitor it, adapt to it,) (Matthew)
11. **Lessons learned from the demise of the Superconducting Supercollider (SSC)** and what has been done to correct mistakes made at that time? (Ruth) (Some wondered whether there is anything left to say about the SSC and whether its demise might not have been warranted).
12. **Physics of the Brain** (Michael Tuts). Might be a follow-on to the Artificial Intelligence Session?
13. **Metaphors of Physics** as used in other contexts (Matthew)

Arian thanks everyone and adjourned the session with a plea for everyone to nominate Fellows. Micah added a plea for EC nominees, award nominees and all other nominees.

Attachment: Ruth's Forum Study Proposal

(Note: no decision was made by the executive committee as to whether to proceed with this proposal, except for determining finances.)

Objectives:

- 1) To provide opportunities for even more active participation by Forum members in Forum activities.
- 2) To expand interest and interest and develop expertise in areas where physics has much to offer society outside of the tradition FPS areas of nuclear weapons, energy efficiency and alternative energy sources

Benefits:

- a) Recruiting new people to the FPS area;
- b) Providing opportunities to interact with other APS units especially divisions and fora on P&S issues
- b) Developing/ exploring new topics for new sessions at national meetings
- c) Increasing networking and meeting possibilities for talented newcomers with top people in P&S.

Description: Similar to the Program Committee, the Executive Committee and Alumni/Friends should develop potential topics for Forum Study Groups and distribute them with a paragraph of description. The ExComm (or a subcommittee) would approve five-six or so to be published in the Newsletter (and Physics Today and many other means now available) with a call for both volunteer FPS Study Group Leaders for these topics and for potential new P&S physicists who are interested and would like to develop expertise in the topic areas including graduate students, post docs, and faculty members at teaching institution, community colleges and other educational institutions as well as the full range of FPS members working in labs, private sector, government, NGOs and so on. The leader of the study group identified for a given topic member will work with to P&S newbies to write papers on the topic. All papers will then be distributed to all members of the study group and the best selected for submission to the FPS. If funding can be secured then the writers of the best papers and the study group chairs will be invited to a workshop/symposium at ACP to finalize and present their reports and hear several experts speak about what needs to be done. If insufficient funding is obtained, electronic means (e.g. Skype) could be used.

Outcomes: The last time this was tried in 1982 or so, it was successful in recruiting many new active members of FPS. Double digit numbers of new people who have written good papers, would be a success with anything over 30 a howling success. New ideas (or even updated old ones) are priceless.

What The Executive Committee would have to do?

- 1) Approve (or even come up with) a list of 6 topics or so for the studies.
- 2) Find funding to support the travel for the study group workshop.
- 3) Ensure that POPA and PPC have the opportunity to contribute topics.
- 4) Approve (even identify) committed leaders for each of the study groups, from the Executive Committee if needed.
- 5) Publicize the activity to recruit volunteers who must prepare a paper on the area in which they are interested. Study group participants will be selected on the quality of their submissions.