

Forming P5, the Particle Physics Project Prioritization Panel

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Background

- Following the discussion at the last HEPAP meeting on ideas for forming the Particle Physics Project Prioritization Panel (P5) , there were further iterations of ideas within HEPAP, within the Long-Range Planning Subpanel, and with the DPF Executive Committee
- A message to the community was prepared that included an invitation for discussing P5 at a web board set up at <http://wb.hep.net:8080/~p5>
- The message was circulated to the DPF, the DPB, and the YPP

Message to the Community

Dear Members of the Particle Physics Community,

Ideas on forming the Particle Physics Project Prioritization Panel (P5), one of the recommendations of the DOE/NSF HEPAP Subpanel on Long-Range Planning, were discussed at the HEPAP meeting in April 2002. In the interest of furthering community input on how to set up this important body, we are establishing a website (<http://wb.hep.net:8080/~p5>) as a bulletin board where we welcome your suggestions and views on the various aspects of P5. To stimulate the discussion, here is an initial statement of ideas on forming P5 and some comments that flow from members of HEPAP and ensuing discussions:

Message (continued)

The Particle Physics Project Prioritization Panel

Role

P5 is seen in the Subpanel's report as being the keeper of the particle physics roadmap and as acting to set priorities for medium sized projects (with a cost of roughly \$50M to \$500M). The project road map makes explicit the "opportunity costs" of decisions on possible projects within the overall national program and a given funding level. An implied role for P5 is as an advocate for the particle physics program that results from its actions.

Comments: At the HEPAP meeting in April and since then, there has been considerable discussion on the role of P5 and how that consequently relates to the charge and membership. For example, there are suggestions to split the continuing function of keeping the particle physics roadmap and that of establishing priorities between specific projects. Others argue that the standing of the members in the community and the investment of time they will put into understanding the projects makes them qualified to make the priority decisions. The role/scope of P5 is a key issue around which a good deal of the community discussion will likely focus.

Message (continued)

Structure

P5 would be a subpanel of HEPAP.

Charge

The charge will be made by the agencies after consultation with HEPAP. A continuing general charge would be: prioritize mid-scale projects in the context of the national program.

Appointment Process for Members

This would be done as for a HEPAP subpanel. Members would be formally appointed jointly by the DOE Office of Science and the NSF MPS after consultation with the chair of HEPAP and the proposed chair of P5. Members would be appointed for terms of several (3?) years, with the intent of having a membership that changed (by 1/3 of the membership?) over time through the use of staggered terms.

Message (continued)

Comments on the Structure, Charge, and Appointment Process:

A HEPAP subpanel is an existing format that reports through HEPAP and meets the requirements of the Federal Advisory Committee Act (FACA). An entirely separate advisory committee structure for P5 would require a set of approvals that would at best take considerable time to put in place. As a subpanel (and unlike HEPAP itself) parts of some meetings could be in executive session, and P5 would report through HEPAP to the agencies. The formal, statutory responsibility for spending federal funds lies in the agencies, so like HEPAP the function of P5 is advisory to the agencies. Like HEPAP, its advice would have weight due the members of P5 and the wisdom manifest in its recommendations. So that there would continuity of knowledge of the considerations and deliberations of P5, the term of membership should be several years.

Message (continued)

Membership

Suggestions for members would be drawn from the community (through requests sent out through the DPF and DPB), the DPF and DPB Executive Committees, HEPAP, the prospective chair of P5.

Comments on Membership: At the HEPAP meeting at the end of April, a number of people looked for the size of P5 to be in the neighborhood of 10 to 12 people, somewhat smaller than that of a typical HEPAP subpanel. The issue of having fixed "chairs" from the DPF, DPB, laboratory PAC's, etc. was discussed, but the consensus was that the membership should be drawn broadly from the community as a whole, with attention to the particular set of issues under discussion. Members from the lab PAC's and SAGENAP would add knowledge of the detailed vetting process for projects, but this may run counter to NSF rules for reviewing a project twice.

Message (continued)

I look forward to your comments on establishing P5 so that it best serves the future of particle physics in the U.S. The next HEPAP meeting is at Cornell on August 5-6, and I hope that we can have the full benefit of community-wide input at that time.

Regards,

Fred Gilman
Chair, HEPAP

Web Discussion of P5

- Message from Bagger and Barish giving the background discussion to the P5 recommendation of the Subpanel
- HEPmap working group of HEPAP as an alternative concept from Janet Conrad
- Memo on the role of P5 from Persis Drell
- Fewer than 10 other postings

The Role/Function of P5

- Many of the discussions with those in the community and in the agencies that I have had recently center on the role/function of P5.
- The problem of prioritizing mid-sized projects is one the field has to face, whether by P5 or by some other method: It is extremely unlikely that we will have the resources to do all of the possible projects in the Subpanel's report.

The Role/Function of P5 (continued)

- The prioritization needs to be done across the field of particle physics, broadly defined, and across funding sources.
- P5 should not extend the timescale of going from the initial proposal of an experiment to its construction and operation.
- P5 is to prioritize projects, not to revise the whole national program; if we get to questions of this order, we will need a dedicated subpanel.
- Let's think carefully, but let's get going.