

# DPF Program Committee: Rationale

Currently, the vice-chair is responsible for DPF @ April Meeting.

- Often not in the email loop until September
- Needs to choose Invited Speakers by October
- Sorting categories not updated (that happens in June)
- No defined mini-symposia (invited talk + parallel)

A Program Committee can provide Institutional Memory and Improve Program

- Representatives from all sub-fields
- Better sorting categories for initial abstract submission
- Good selection of invited talks with the most exciting new physics
- New mini-symposia and focus sessions
- Provide experienced sorters for the sorting meeting in January
- Involve a larger cross section of DPF in the April Meeting planning

## Agenda for tonight

- New members: Marc Sher and Bertrand Echenard  
Designate a wiki editor for tonight.  
<https://zzz.physics.umn.edu/lowrad/dpf>
- Approve Mission Statement
- Decide Term and Nomination Procedure
- Assign topical groups for the following near-term jobs
  - Converge on the Sorting Categories
  - Begin definition of mini-symposia
- Prioritize secondary mission jobs
- Define sub-committees

# Program Committee Mission:

## **Primary Mission** (all participate via assignment to sub-field)

- Provide Institutional Memory with regard to the April Meeting

- Aid the Vice Chair in producing the best program for DPF at the April Meeting

- Review and revise sorting categories (for the abstracts) every Spring and send to APS (Vinaya)

- Over the summer

- Define a set of mini-symposia and focus talks and find speakers

- Identify relevant Invited Talk sessions and find speakers

- Target cross disciplinary topics (communicate with other Program Committees)

- Send sorters to the sorting meeting

- Provide Chairs for the meeting

## **Secondary Mission** (designated jobs and sub-committees)

- Improve the April meeting overall

- Improve relevance of April meeting (and APS) to DPF

- Better utilization of APS resources

- Improve web presence (our roles and names)

- Resource for Snowmass planning

**Questions:** What needs to change on this list? Can we approve the “mission statement”?

- Nomination procedure?

- Term (how to stagger?) names

## Old assignments

### **Group 1.** Led by Dmitri Denisov

Roger Rusack    Chris Hill    Stephen Sekula    Mayda Velasco

F1. Higgs Physics   F2. Electroweak Physics   F3. Top-Quark Physics   F4. Quark Flavor Physics (with group 4)

### **Group 2.** Bob Bernstein

F5. Charged Lepton Interactions (not sure what will end up in here – combine with another group if warranted)

### **Group 3.** Mike Kordosky and Mayly Sanchez

F6. Neutrino Physics: Results and New Initiatives   F7. Neutrino Experiments

### **Group 4.** Sheldon Stone and Tom Browder

F4. Quark Flavor Physics (with Group 1)   F8. Strong Interactions and Hadron Physics

### **Group 5.** Chris Hill   Stefano Profumo   Tim Tait

F9. Supersymmetry Searches and Models   F10. Beyond the Standard Model Physics

F13. Theoretical Results (notify other groups when these should be combined with another category)

### **Group 6.** Matt Graham   Matthew Szydagis   Rafael Lang   Jodi Cooley   Tom Diehl (where will DE end up??)

F11. Dark Sector Theories and Searches (this is a pretty big catch-all!, you should sort into sub categories)

F12. Particle Cosmology

### **Group 7.** Roger Rusack and Dmitri Denisov (with help from Group 1)

F14. Detector R&D and Performance   F15. Computing and Data Handling (I don't know what will end up here)

Roger Rusack <rusack@umn.edu>, Robert H Bernstein <rhbob@fnal.gov>, Sheldon L Stone <slstone@syr.edu>, Tom Browder <teb@phys.hawaii.edu>, Mayda Velasco <m-velasco@northwestern.edu>, Chris Hill <Christopher.Hill@cern.ch>, makordosky@wm.edu, Mayly Sanchez <mayly.sanchez@iastate.edu>, Mathew Thomas Graham <mgraham@slac.stanford.edu>, Thomas Diehl <diehl@fnal.gov>, "Szydagis, Matthew" <mszydagis@albany.edu>, Rafael Lang <rafael@purdue.edu>, "James D. Olsen" <jolsen@princeton.edu>, Dmitri <denisovd@fnal.gov>, Stefano Profumo <profumo@ucsc.edu>, Tim Tait <ttait@uci.edu>, Jodi Cooley <jsekula@smu.edu>, Stephen Sekula <ssekula@physics.smu.edu>

Match Name to sorting category tonight

Once assigned, please evaluate the category in the next couple weeks  
you may change the category name or combine or bifurcate  
revise the wiki with your changes

After that I will group you together to larger sorting groups if necessary

# Draft of New Sorting Categories

Advanced Computational Techniques

Accelerator Physics and beamlines

Detector R&D

Dark Matter Theory

Dark Matter Experiments

Hidden Sector Searches

Axions theory (or should it be axions and hidden sector searches?)

Axions experiment

Dark Energy

Neutrino Theory

Neutrino Experiment

Particle Astrophysics

Supersymmetry Searches and Models

Beyond Standard Model Physics (Not including SUSY)

QCD and Hadron Physics

Electroweak Physics

Lepton non-universality

Field theory

Standard Sirens

Flavor Physics

Tests of the SM using CP violation

Tests of the SM using rare decays

Tests of lepton universality

Exotic baryons and mesons

Measurements of CKM mixing angles

Dynamics of heavy quark production

# What kind of sessions do you want to see in 2019?

## Sign up to “think” about them and help Young-Kee

### mini-symposia or Invited Talk sessions

Low background techniques (with DNP) (DNP did it on its own this year)  
Symmetries (with GPMFC) (e.g. CPT violation exp and theory)  
Cosmic Microwave Bkgd – Progress toward S4 (with DAP)  
DM Complementarity – indirect, direct, accelerator (with DAP)  
Light Dark Matter  
Axions (with GPMFC)

### Sorters for next year (need 2 more)

Jodi Cooley

Dmitri Denisov

Stephen Sekula

# DPF Program Committee

Bob Bernstein	Sheldon Stone	Tom Browder	Mike Kordosky
Mayly Sanchez	Matt Graham	Matthew Szydagis	Rafael Lang
Jodi Cooley	Tom Diehl	Stefano Profumo	Tim Tait
Roger Rusack	Chris Hill	Stephen Sekula	Mayda Velasco
Jim Olsen	Dmitri Denisov		

Ex officio: Tao Han, Young Kee Kim, Priscilla Cushman

Add Marc Sher and Bertrand Echenard

How are we doing with balance?

What subfields need representation?

Who else should we add?



# Improving the April Meeting: Background

2013 APS task force on April Meeting attendance

Members from DNP, DAP, DPB, and DPF. Chaired by Tim Gay (DAP).

## **Finding:**

April is bad for DPF because new results shown at March/Summer conferences

## **Solution:**

Move meeting to October and have it in Washington DC

but, date not acted on because DNP has a major November meeting

DC Location will be every other year.

## **Solution:**

Combine April and March meetings

Acted on – the first meeting was supposed to be 2019 in Boston

But in the end, APS has limited resources for a meeting of that size.

# Improving the April Meeting: Known Problems

**DAP** sees the April meeting as their big meeting

→ those areas of DPF that are mostly closely related do well.

**DNP** is less intellectually unified than DPF

→ both March and April meeting is a way to make career and physics connections among their sub-fields and between DNP and other divisions.

**DPF** is fundamentally international

APS April competes with a large number of conferences in DPF's fields of study  
(including our own DPF meeting every other summer)

## Statement from the Program Committee's analysis of the issues

APS April's unique values are in (1) fostering interconnections with the rest of APS, especially DNP, DAP, and DPB and (2) providing opportunities for students and early career speakers to give talks at a conference. If APS April focuses on what it does best, then it will never be seen as a “must-go” conference to certain segments of DPF in a period of highly constrained budgets and a crowded set of international conferences. If it attempts to compete with the European conferences, ICHEP, the large number of neutrino conferences, etc., APS April may be so diluted it will provide neither of its unique values.

# Improving the April Meeting: Other Constraints

**Plenary and Public Talks** are the only ones not in parallel

**Invited Talks: 36 min each, 3 per session**

*decided in October of the year before*

*DPF has 10 sessions to fill. 3 talks per session*

**Contributed Talks: 12 min each, 9 per session**

*initiated by abstract submission*

*all abstracts must be accepted, but we can move some to posters*

**Disadvantages:** Spreads attendance thinly over (some) sessions

Even for Invited talks !

Miss a lot of the ones you want to see.

**Advantages:**

Rigidity keeps the program synchronous between fields

Maximizes opportunities for talks

(people cannot afford to come to a conference without a talk)

## Discussion, Prioritization, Specific Names

- (a) Providing a forum for undergraduate talks specific to DPF. The forum could be led by someone in one of the teaching universities. SPS does provide some travel funds
- (b) Mentoring and career building advice for graduate students and young researchers is very important and we should strengthen this with forums and panels.
- (c) Better connections by DPF to existing APS programs.
  - science policy, climate, politics, outreach, grad mentoring, undergrads
  - Examine important social issues e.g. mental health issues , diversity, bullying
- (d) Capitalize on the broad representation across many divisions by better coordination on joint sessions. Need to coordinate special sessions (last minute forums like Foster or Restrospectives) , so we don't take away from invited sessions and prize sessions.
- (e) Updates from the Funding Agencies. Tie meetings to the Snowmass process
- (f) Liven up the massively parallel agenda.
  - Each student talk ALSO has a poster, Panel discussions instead of talks
  - Thesis Slam sessions, reduce number of DPF Invited sessions, replace with symposia
- (g) Better connection to the locale – resources and public outreach