APS | DIVISION OF PARTICLES & FIELDS

Recent Activities

J. Hewett, 2016 DPF Chair

U.S. DEPARTMENT OF ENERGY
Office of Science

SLAC NATIONAL ACCELERATOR LABORATORY

DPF Executive Cmtte

SLAC

- Chair line
  - » Marcela Carena, Nicholas Hadley, JoAnne Hewett, Joseph Incandela
- Councillor
  - » Philip Mike Tuts
- Secretary/Treasurer
  - » Kate Scholberg
- Members-at-large
  - » Mirjam Cvetic, Aida El-Khadra, Robin Erbacher, Karsten Heeger, Joshua Klein, Laura Reina
- Young Scientist Member
  - » Louise Suter

- ~ 3500 members (Domestic + International)
  - » Everyone should sign up for DPF!!

Role of the DPF

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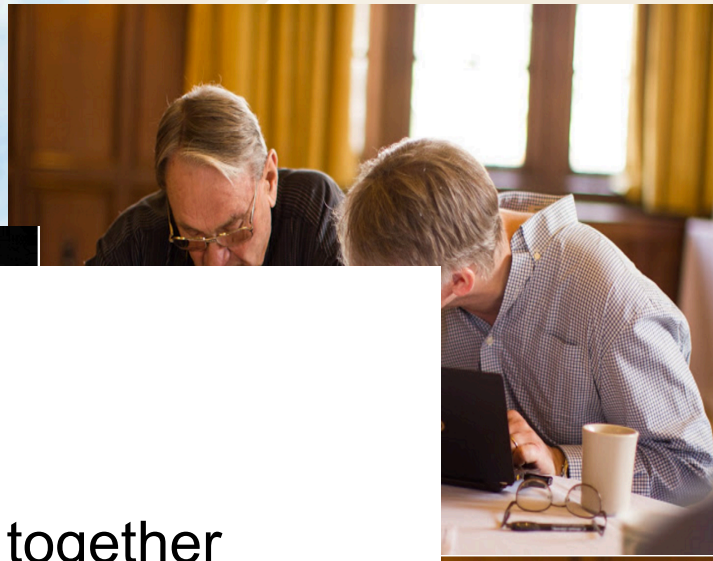
What does the DPF do?

- Sponsor Meetings
  - » Bi-annual DPF meeting
  - » April APS meeting
  - » Snowmass
- Recognition of achievement
  - » APS Fellows
  - » Prizes and Awards
- Work with the APS
- Address concerns of the community
- Sponsor studies
- Serve as voice of the community

DPF2015

AUG 4-8 | ANN ARBOR, MI

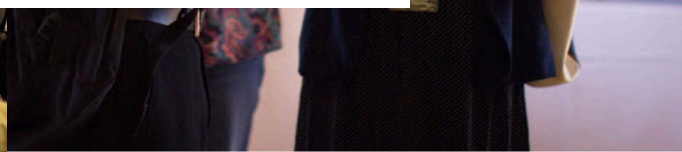
Meeting of the **Division of Particles & Fields** of the American Physical Society



Was a great success!

- Bi-annual Division meeting
- Forum for our community to come together
- ~500-600 participants
- Opportunity for young scientists to present their work
- Opportunity to meet with agency program managers

- Thanks to the local organizors!



DPF 2017

- Fermilab July 31- August 4
  - » More information soon…

2015 April APS Meeting

American Physical Society Sites | APS | Journals | PhysicsCentral | Physics

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Pages For:

Home | Meetings & Events | **April Meeting**

April Meeting 2015 • April 11 - 14 • Baltimore, Maryland

The APS April Meeting is heading to Baltimore, Maryland! This meeting will bring together physicists and students in astrophysics, gravitational physics, nuclear physics, and particle physics to share new research and insights at sessions sponsored by participating units.

Abstract Submission

Now Open
Deadline: Friday, January 9, 2015 at 5:00 p.m. EST
▸ Submit an Abstract

Registration

Now Open
Ways to save, fees, and how to register.
▸ Register Now

Save on Registration
APS members save significantly on registration rates.
Join now or renew your membership.

Hotel & Travel

Get reduced rates on hotels near the convention center making your reservations online.
▸ Book Now

APS physics APRIL MEETING2015

Venue: Hilton Baltimore Inner Harbor
Expected Sessions: ~75 Invited
Latest Research From: 19 APS Units

51 invited DPF talks
+60 contributed talks
Session organized around the five P5 Science Drivers

2016 April APS Meeting

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Home | Meetings & Events | **April Meeting**

APRIL MEETING2016

April 16 - 19
SALT LAKE CITY, UTAH

The APS April Meeting is heading to Salt Lake City, Utah! The meeting will bring together hundreds of physicists to present the latest research in numerous scientific disciplines.

Scientific Program

▸ APS April Meeting 2016 Scientific Program

Registration

On-site registration i
▸ Registration Inform

Hotel & Travel

Manage your reserv
▸ Hotel & Travel Info

International Attendees

▸ APS Meeting Visa Information
▸ Request a Letter of Invitation

6 DPF-only invited sessions
10 Joint invited sessions
3 DPF Prize sessions
31 DPF Contributed sessions!

Venue: Salt Palace Convention Center
HQ Hotel: Salt Lake Marriott Downtown
Expected Sessions: ~75 invited
Latest Research From: 19 APS Units

Save the Date!

April APS Meeting

- Persistent concern on attendance
  - ~500-700 DPF members attend
- Advantages
  - Opportunity to communicate excitement of HEP
  - Opportunity to learn results from other fields
  - Opportunity for young scientist talks
  - Forum for annual business meeting
- Disadvantages
  - Expensive
  - HEP has other major meetings to disseminate results
- 2017 Meeting

Session B6: Laboratory Searches for Dark Energy Scalar Fields

Invited

Sponsoring Units: GPMFC
Room: *150ABC*

Session H18: Alternative Theories of Gravity

Sponsoring Units: GGR

APS April Meeting 2017

January 28-31, 2017
Washington, DC

2015 APS Fellows

- Lothar Baurerdick: For innovation and leadership in building computing systems for high energy physics data analysis which enabled the Higgs boson discovery, and contributions to searches for Higgs decays to W-boson pairs.
- Thomas Blum: For pioneering methods of lattice QCD to improve the computation of kaon properties, hadronic contributions to the anomalous magnetic moment of the muon and the spectrum of hadrons.
- James Cochran: For important contributions to the discovery and measurement of the properties of the top-quark, searches for rare B0-meson decays and definitive contributions to the U.S. ATLAS physics program.
- Hooman Davoudiasl: For elucidating our understanding of the experimental consequences of warped extra-dimensional models of space-time.
- Kaushik De: For development of grid computing architectures that allow worldwide production and distributed analysis of large data sets for ATLAS and other experiments and for exploring physics beyond the Standard Model.
- Maurice Garcia-Sciveres: For leadership in the development of vertex detectors at hadron colliders that enabled studies of top-quark and discoveries including B meson oscillations and the Higgs boson.
- David Gerdes: For contributions to the discovery and study of the top-quark, particularly the development of b-quark tagging, as well as trigger and tracker upgrades that led to improved measurements.
- Tony Gherghetta: For contributions to theories of extra dimensions and supersymmetry, advancing our understanding of grand unification, supersymmetry-breaking and the fermion mass hierarchy.

2015 APS Fellows

- Michael Gronau: For incisive contributions regarding tests of the Kobayashi-Maskawa theory of CP violation and searches for new physics in the decays of particles containing heavy quarks.
- Chirstopher Hearty: For scientific and technical leadership on the BaBar experiment which produced important results on CP violation, flavor physcis and many other areas.
- Graham Kribs: For contributions to our understanding of physics beyond the Standard Model, in particular theories with supersymmetry and extra generations of matter.
- Konstantin Matchev: For contributions to the collider phenomenology of supersymmetry and extra dimensions, studies of dark matter, and leadership in the development and popularization of simulation tools.
- Vivian O'Dell: For leadership in CMS operations and upgrades, the Run Iib Dzero detector upgrade, the Dzero and CMS QCD physics groups and major contributions to the CMS Data Acquisition system.
- Alexey Petrov: For contributions to heavy flavor physics, in particular studies of charm quarks and contributions to indirect searches for physics beyond the Standard Model.
- Roger Rusack: For leadership in the development of advanced photodetector systems used in the Higgs boson discovery and realizaqtion and exploitation of the electromagnetic calorimeter of the CMS experiment.
- Stefan Soldner-Rembold: For leadership of the Dzero Collaboration at the Fermilab Tevatron which provided many discoveries and precision measurements in the field of particle physics.
- Hirohisa Tanaka: For contributions in experimental neutrino physics, particularly for work leading to observation of neutrino oscillations in the T2K experiment and to searches for neutrino oscillations in the Mini-BooNe experiment.
- David Toback: For pioneering work on searches for new particles and leadership of the CDF experiment.

2015/16 Prizes and Awards

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- WKH Panofsky Prize

  Jonathan Dorfan, David Hitlin, Stephen Olsen, Fumihiko Takasaki
  For leadership in the BaBar and Belle expeirments, which established the violation of CP symmetry in B meson deacy, and furthered our understanding of quark mixing and QCD.

- J.J. Sakurai Prize

  G. Peter LePage For inventive applications of QFT to particle physics, particularly in establishing the theory of hadronic exclusive processes, developing nonrelativistic effective field theories, and determining standard model parameters with lattice gauge theory.

- Dannie Heineman Prize

  Andrew Strominger, Cumrun Vafa For leadership in numerous central developments in string theory, QFT, and quantum geometry; including the interplay between string theory and Calabi-Yau geometry and especially for their elucidation of the origin of black hole entropy from microscopic states.

2015/16 Prizes and Awards: Young Scientists

SLAC

- Primakoff Award

  Stefan Höche For innovative techniques of event simulation for high energy hadron colliders, enabling the comparison of theory and experiment with high precision.

- Mitsuyoshi Tanaka Award

  Adish Vartak For contribution to the search and discovery of the Higgs boson and for his exemplary dissertation, entitled “Discovery of a Higgs boson in the H to ZZ to 4L Channel,” covering Higgs physics, the details of his Higgs studies and other contributions to the CMS experiment.

- J.J. and Noriko Sakurai Award

  Yonatan Kahn For proposing a novel method to detect dark photons, for developing halo-independent techniques of direct dark matter detection, and for finding a new viable supersymmetric extension of the standard model

2015/16 Prizes and Awards: DPF Awards

- Instrumentation Award

  Stephen Holland, Gary Varner For the development of technologies for detection of signals in frontier experiments, especially the fully depleted charge coupled device and the `oscilloscope on a chip' integrated circuit.

- Mentoring Award

  Howard Georgi III For his unique dedication to mentoring and supporting a large and diverse community of students and post-doctoral fellows, whose creative theoretical endeavors have had an enormous impact on particle physics as well as the larger scientific community.

Young Scientist Concerns

- Young Scientist representation on DPF exec cmtte
  - » Louise Suter
- Issues Identified
  - » Jobs – more information on process
  - » Remove stigma for industry jobs
  - » Post-Docs – Move too often, lack benefits
  - » Lack of leadership roles & talk opportunities on large experiments
  - » Lack of information on funding opportunities
  - » Travel to conferences is difficult

Open Access Publishing

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CERN and APS announce partnership for Open Access

September 18, 2014

The American Physical Society (APS) and The European Organization for Nuclear Research (CERN) jointly announce a partnership to make all CERN-authored articles published in the APS journal collection to be Open Access.

Articles in APS' *Physical Review Letters*, *Physical Review D*, and *Physical Review C* in 2015 and 2016 will be covered by this agreement. All physics results from CERN will benefit from this partnership, in theoretical physics and experimental physics, at the LHC accelerator as well as other experimental programs.

"CERN is a long-time supporter of APS journals, and is committed to Open Access. This collaboration is a very important step towards global Open Access for a global discipline." said CERN Director General Rolf Heuer.

Although APS is not participating in the current cycle of SCOAP3, the global Open Access initiative in physics coordinated by CERN, this agreement demonstrates both organizations' commitment to Open Access publishing.

"It was important to continue our discussions with CERN, while keeping in mind the financial stability of the APS publishing program," said Mac Beasley, 2014 APS President. "This is a fitting solution that advances physics."

The main issue

Communicate concerns to the APS

- Russian scientists work/visit at national labs
- Travel restrictions for national lab employees

- Please let us know how we can help you!

Gender difference study

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- Coordinated by Bob Bernstein
  - » Collaboration with U Chicago Sociology Dept
  - » FNAL Institutional Review Board oversight
- Look for gender-correlated differences in letters and research statements of young scientist job applicants
  - » Measuring differences (not bias), if they exist
- Data sample from existing AJO samples
- Blind analysis
  - » Computer search for characteristic text differences
  - » Confidentiality built into methodology
- Results to be published in refereed journal
  - » Report aggregate data only
- Aim to start study this summer

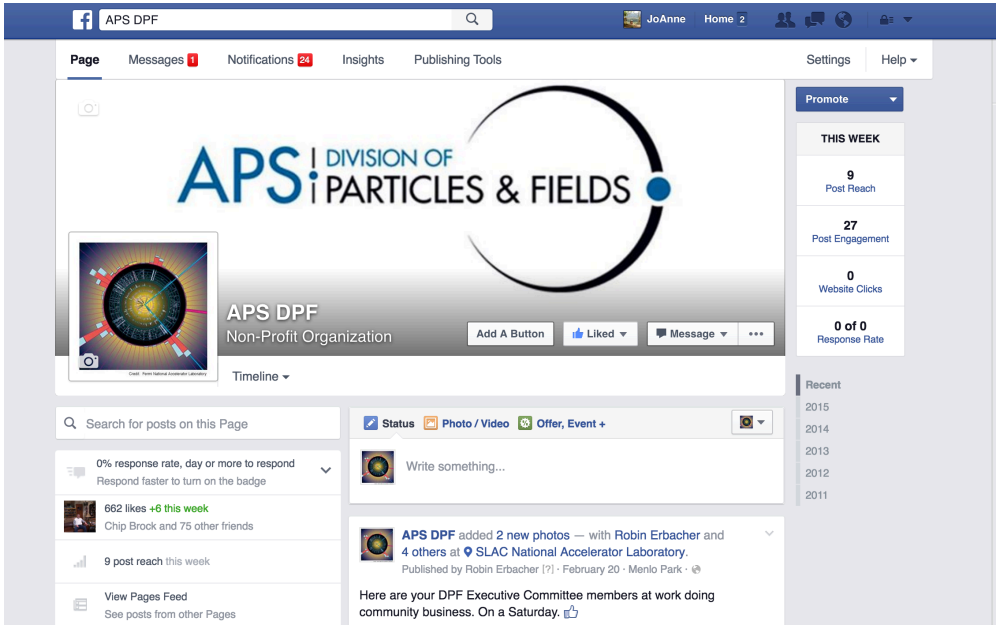
Maintaining P5 momentum

- P5 plan has legs
- Community input via DPF was vital to its success
  - » Snowmass
  - » Letter of support
- We may stay on course

- Best way to keep community moving forward together?
  - » Talk to each other!
- Virtual town-hall planned
  - » Timing, format TBD

Communication of Activities

- Active facebook page to reach “younger” members.
- Working to update DPF newsletter on regular basis



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Let us know how we can serve you better!