DPF Program Committee Meeting December 8, 2017 Agenda

Welcome and Introductions

Jim Olsen

APS and DPF Committees and Organization Tao Han, Marcela Carena

April Meeting Planning Prisca Cushman

DPF Program Committee Mission Discussion

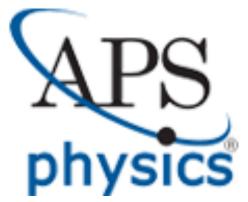
DPF Program Committee

Bob Bernstein Sheldon Stone Tom Browder Patricia Vahle Mayly Sanchez Matt Graham Matthew Szydagis Rafael Lang Jodi Cooley Tom Diehl Stefano Profumo Tim Tait Roger Rusack Chris Hill Stephen Sekula Mayda Velasco

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

Dmitri Denisov

About APS



Mission Statement

The American Physical Society strives to:

- Be the leading voice for physics and an authoritative source of physics information for the advancement of physics and the benefit of humanity;
- Provide effective programs in support of the physics community and the conduct of physics;
- Collaborate with national scientific societies for the advancement of science, science education and the science community;
- Cooperate with international physics societies to promote physics, to support physicists worldwide and to foster international collaboration;
- Promote an active, engaged and diverse membership, and support the activities of its units and members.

Society Governance

APS is a membership organization. The Presidential line is elected by the entire membership and consists of four persons, who rotate through one-year terms as Vice President, President-Elect, President, and Past President.

Officers



President Laura Greene



President-Elect Roger Falcone



Vice President
David Gross



Past President Homer Neal

About APS

Divisions

Atomic, Molecular & Optical Physics (DAMOP)

Astrophysics (DAP)

Biological Physics (DBIO)

Chemical Physics (DCP)

Computational Physics (DCOMP)

Condensed Matter Physics (DCMP)

Fluid Dynamics (DFD)

Gravitational Physics (DGRAV)

Laser Science (DLS)

Materials Physics (DMP)

Nuclear Physics (DNP)

Particles and Fields (DPF)

Physics of Beams (DPB)

Plasma Physics (DPP)

Polymer Physics (DPOLY)

Quantum Information (DQI)

Forums

Early Career Scientists (FECS)

Education (FEd)

Graduate Student Affairs (FGSA)

History of Physics (FHP)

Industrial and Applied Physics (FIAP)

International Physics (FIP)

Outreach and Engaging the Public (FOEP)

Physics and Society (FPS)



Far West Section (FWS)

Four Corners (4CS)

Mid-Atlantic (MAS)

New England (NES)

New York State (NYSS)

Northwest (NWS)

Ohio-Region (OSAPS)

Prairie Section (PSAPS)

Southeastern (SESAPS)

Texas (TSAPS)



Topical Groups

Energy Research and Applications (GERA)

Few-Body Systems (GFB)

Hadronic Physics (GHP)

Instrument and Measurement Science (GIMS)

Magnetism (GMAG)

Medical Physics (GMED)

Physics Education Research (GPER)

Plasma Astrophysics (GPAP)

Precision Measurement & Fundamental Constants (GPMFC)

Physics of Climate (GPC)

Shock Compression of Condensed Matter (GSCCM)

Soft Matter (GSOFT)

Statistical and Nonlinear Physics (GSNP)

About April Meeting



Meetings & Events

APS annual meetings are attended by thousands of physicists, scientists, and journalists from around the world. They offer valuable opportunities for presenting research, sharing insights, and networking, as well as related workshops and activities for scientific discussion, professional development, improving education, and science advocacy.

APS March Meeting 2018

March 5-9, 2018

Los Angeles, CA

For DCMP, DCP, DBIO, DMP, ...

APS April Meeting 2018

April 14-17, 2018

Columbus, OH

For DPF, DNP, DAP, DGRAV, DPB and DCOMP Plus FPS, FEd, FGSA, GPMFC, and GPER

2018 Chair line:

2018 Chair: Cliff Will (DAP)

Chair Elect: John Wilkerson (DNP)

Vice Chair: Tao Han (DPF)

Past Chair: Dan Holz (DGRAV)



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APRIL MEETING 2018

April 14-17, 2018 Columbus, Ohio

About

Schedule

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Registration

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Exhibits

APS April Meeting 2018 Columbus, Ohio April 14-17, 2018

The APS April Meeting encapsulates the full range of physical scales, from "Quarks to the Cosmos (Q2C)*. Research will be presented on topics from 19 participating APS units including particle physics, nuclear physics, astrophysics, and gravitation. The 2018 theme is a "Feynman Century," which will be broadly examined through speakers and scientific sessions.

Venue: Greater Columbus Convention Center

Join Us at the APS April Meeting 2018

- · Submit an Abstract
- . Register for the Meeting
- · Book a Hotel Room

Code of Conduct

All meeting participants are expected to abide by the Code of Conduct for APS Meetings.

http://www.aps.org/meetings/april/about.cfm



Abstract Submission Deadline

You must be an APS member or a reciprocal society member to submit an abstract.

Submit an Abstract

Early Registration Deadline

Registration fees go up as the meeting gets closer. Save money by registering early.

Register for the Meeting

Hotel Reservation Deadline

Hotels may sell out before the reservation deadline so book as early as possible.

Reserve a Hotel Room

Plenary and Public Talks are the only ones not in parallel
Invited Talks are decided early - DPF has 10 sessions to fill. 3 talks per session
Contributed Talks are initiated by abstract submission
assigned to sessions during the Sorter's Meeting – January 19 at APS
all abstracts must be accepted (crackpot session), but we can advise

Saturday, April 14	Sunday, April 15	Monday, April 16	Tuesday, April 17
7:00am-5:00pm	8:00am-4:00pm	8:00am-4:00pm	8:00am-11:00am
Registration	Registration	Registration	Registration
Block 1	Block 1	Block 1	Block 1
8:30am - 10:18am	8:30am - 10:18am	8:30am - 10:18am	8:30am-10:18am
Plenary Session I	Invited and contributed	Plenary Session II	Plenary Session III
Block 2	Block 2	Block 2	Block 2
10:45am -12:33pm	10:45am - 12:33pm	10:45am - 12:33pm	10:45am-12:33pm
Invited and contributed	Invited and contributed	Invited and contributed	Invited and contributed
Block 3	Block 3	Block 3	Block 3
1:30pm - 3:18pm	1:30pm - 3:18pm	1:30pm-3:18pm	1:30pm-3:18pm
Invited and contributed	Invited and contributed	Invited and contributed	Invited and contributed
Block 4	2:00pm - 5:00pm	2:00pm – 5:00pm	Block 4 (if required)
3:30pm - 5:18pm	Poster Session II*	Poster Session III	3:30pm-5:18pm
Invited and contributed			Invited and contributed
	Block 4	Block 4	
5:30pm - 7:00pm	3:30pm - 5:18pm	3:30pm - 5:18pm	
Poster Session I*	Invited and contributed	Invited and contributed	
5:30pm – 7:00pm	5:30pm-7:00pm	5:30-6:30pm	
Welcome Reception	Awards Ceremony	Unit Business Meetings	
7:00pm	8:00pm Special Symposium	7:30pm Special Symposium	
Public Lecture			
7:00pm			
Special Symposium			

^{*} Note: Scheduling of poster sessions depends on the number of posters.

Invited Talks

Nominator: Cushman, Priscilla

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Ctrl #	Speaker	<u>Nominator</u>	Session Title
* <u>99054</u>	Spkrs(3, 1)	Berti, Emanuele	Gravitational Waves and Dark Matter Searches (Primary Unit: DGRAV)
* <u>99071</u>	Spkrs(3, 1)	<u>Natarajan,</u> <u>Priyamvada</u>	HIGH ENERGY PARTICLE ASTROPHYSICS (Primary Unit: DAP)
99081	Spkrs(3, 1)	Cushman, Priscilla	The Energy Frontier: Results from the LHC
* 99082	Spkrs(3, 1)	Walker, Thad	Hidden Sector Searches at the Sensitivity Frontier (Primary Unit: GPMFC)
99083	Spkrs(4, 1)	Cushman, Priscilla	The High Luminosity LHC Upgrade and New Physics Windows
99084	Spkrs(3, 1)	Cushman, Priscilla	Understanding the Neutrino Sector
99085	Spkrs(3, 1)	Cushman, Priscilla	Exotic hadrons from the LHC and B-Factories
99087	Spkrs(3, 1)	Cushman, Priscilla	Celebration of the 40th Anniversary of the Time Projection Chamber (Join Unit: DNP)
99088	Spkrs(3, 1)	Cushman, Priscilla	New Results and Challenges in WIMP Direct Detection
99090	Spkrs(3, 1)	Cushman, Priscilla	Sakurai and Panofsky Prize
99091	Spkrs(3, 1)	Cushman, Priscilla	Frontier Physics enabled by New Facilities
99092	Spkrs(3, 1)	Cushman, Priscilla	New Approaches to Direct Dark Matter Searches

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Invited Talks

Saturday 4/14	10:45 - 12:33	DPF 99088 New results and Challenges in WIMP dark matter	DNP 99094 From Neutron Skins to Neutron Stars	DAP 99061 TIME DOMAIN ASTROPHYSICS	FECS/FPS 99037 Getting the word Out	FIP 99033 Opportunities in Global Nuclear Science Industries	RESERVED	
	13:30 - 15:18	DPB	GFB/DNP/GHP 99079 From QCD to the Deuteron	DAP/DNP 99059 TRACING CHEMICAL EVOLUTION	DGRAV 99046 Recent LIGO/VIRGO results	FPS 99093 Nuclear Weapons and Ballistic Missile Defense	GPMFC/DPF 99082 Hidden sector searches at the Sensitivity frontier	
	15:30 - 17:18	DPF 99092 New Approaches to dark matter searches	DNP 99096 Deep learning and quantum computation in nuclear physics	DAP 99071 HIGH ENERGY PARTICLE ASTROPHYSICS	DGRAV 99050 Third- generation gravitational wave detectors	СОМ	FEd 99041 Research in Recruiting Physics Teachers	
Sunday 4/15	8:30 - 10:18	DPF 99090 Sakurai and Panofsky Prize	DNP 99097 Baryon Density physics in nuclei and the cosmos	DAP/DGRAV 99073 FIREBALL EMISSION FROM BINARY NEUTRON STAR MERGERS	DPB	FGSA	FEd 99040 Excellence in Physics Education Award	
	10:45 - 12:33	DPF/DNP 99087 Celebration of the 40th anniversary of the TPC	GHP 99100 Snapshot of the Dynamics of the Nucleon	DAP 99063 CRISIS IN COSMOLOGY	DGRAV/GPMFC 99056 Tests of general relativity	DCOMP/DNP 99045 Many body quantum computations in nuclear physics	FPS/FHP 99031 Dark Matter & Galaxies: The Legacy of Vera Rubin	
	13:30 - 15:18	DPB	DNP 99095 Baryon and Lepton Number Violation	DAP/DNP 99060 R- PROCESS NUCLEOSYNTHES IS	FOEP/GPMFC 99028 Low-Energy Precision Tests of the Standard Model	FPS 99032 Awards Session	FHP/DCOMP 99075 The History of Numerical Relativity	DGRAV 99048 Quantum aspects of gravitation
	15:30 - 17:18	DPF 99084 Understanding the Neutrino Sector	DNP 99098 R-process and shell evolution near the doubly- magic nucleus 78Ni	DAP/DNP 99069 PRIZE SESSION	DGRAV/DCOMP 99055 Binary merger simulations	CSWP 99086 Creating an Inclusive Physics Community for the Next Century	FEd/GPER 99044 The Cutting Edge of Physics Education Research	

Invited Talks

Monday 4/16	10:45 - 12:33	DPF 99091 Frontier Physics enabled by New Facilities	DCOMP/DAP 99065 THE BOLD NEW ERA OF BIG DATA & MACHINE LEARNING	FIP/FECS 99036 Prize Winners	DGRAV/DAP 99052 Gravitational wave sources: Compact binary formation scenarios	FPS 99029 Science Advocay	GPER/FEd 99026 Physics Education Research: Network Analysis, Institutional Change, and Troubleshooting in Laboratories	GHP/DNP 99078 Structure of the pion and Kaon as a theater for QCD.
	13:30 - 15:18	DPF 99085 Exotic Hadrons (including Tanaka)	DNP/GHP 99077 Axial structure of the nucleon	DAP/DGRAV 99074 THEORY OF EM COUNTERPARTS TO GW EVENTS	DGRAV 99047 Developments in gravitational theory	FHP 99076 The Legacy of Richard Feynman	FEd 99043 FEd Effective Practices for Program Review and Improvement: APS Task Force preliminary report	
	15:30 - 17:18	DPF/DGRAV 99054 Gravitational waves and dark matter searches	DNP Prize/Award session. (Faculty, Feshbach, and Bonner)	DAP/FHP 99066 HISTORY OF WOMEN PIONEERS IN ASTRONOMY	RESERVED	RESERVED	FIP 99034 Physics Experiments in Antarctica, What They Tell Us about the South Pole and the Changing Climate	
Tuesday 4/17	10:45 - 12:33	DPF 99081 Energy Frontier: LHC 1	FPS 99030 Policy and the Trump Admin.	DAP 99062 MAPPING THE LOCAL UNIVERSE	DGRAV 99051 Unveiling massive black holes	FIP 99035 Progress and Challenges for Women Physicists in Africa, Asia, and the Middle East	FEd 99042 FEd Preparing graduate students for careers outside academia	
	13:30 - 15:18	DPF 99083 The High Luminosity LHC Upgrade and New Physics Windows	DNP/GFB/GHP 99080 Weakly bound systems	DAP 99064 LENSING PROBES OF DARK MATTER	DGRAV/DAP 99053 Low-frequency gravitational wave astronomy	FHP/DGRAV 99057 The Chapel Hill Conference and its role in the Renaissance of General Relativity		

Contributed Talk Session Types

Contributed Session: A session of all contributed talks that is organized at the sorters meeting on a topic that was not chosen ahead of time but which emerges out of the randomly submitted abstracts. It consists of a maximum of 9 contributed abstracts to be presented in the 108-minute time block. This allows each abstract 10 minutes for presentation and 2 minutes for questions/discussion.

Combined Session: A session that combines contributed and invited talks, organized at the sorters meeting based on a topic that was not chosen ahead of time, and for which contributed papers were not actively solicited; consists of one invited talk and 6 contributed talks.

Focus Session: Usually one physics focus. We can assign these during the sorting, but should be arranged ahead of time based on communication with interested parties. Often starts with a longer talk

Mini-symposia: Similar, but more interdisciplinary. E.g. based on common technologies rather than physics. DNP uses this a lot. E.g. a mini-symposium on low background techniques.

Contributed Talks

Abstracts are submitted with the following categories

- F1. Higgs Physics
- F2. Electroweak Physics
- F3. Top-Quark Physics
- F4. Quark Flavor Physics
- F5. Charged Lepton Interactions
- F6. Neutrino Physics: Results and New Initiatives
- F7. Neutrino Experiments: Backgrounds, Systematic Errors and Simulations
- F8. Strong Interactions and Hadron Physics
- F9. Supersymmetry Searches and Models
- F10. Alternative Beyond the Standard Model Physics
- F11. Dark Sector Theories and Searches
- F12. Particle Cosmology
- F13. Theoretical Results
- F14. Detector R&D and Performance
- F15. Computing and Data Handling (same as Q6)

Need communication with the contributers BEFORE abstract submission or between submission and the deadline.

This is where the Program Committee can help out: Social engineering behind the scenes.

Schedule (already done)

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January 30	Committee meets at April 2017 in Washington, DC, 12:30-2:00 PM
July 14	Changes to sorting categories due to Vinaya Sathyasheelappa at vinaya@aps.org
September 22	First April Meeting announcement and call for abstracts posted to web-site
October	Notify program chairs of award and prize winners
October 20	Deadline for unit program chairs to submit final invited session information to Invited database (consult Ebony Adams at adams@aps.org for help)
November 3	April Program Committee meets via teleconference (11:00 AM EST) Invited sessions placed
December 15	April invitation letters sent from APS by e-mail to invited speakers

Schedule (still to be done)

January 12: Abstract deadline

January 19: Sorters Meeting at APS (Friday). Need a list of chairs for sessions.

January 26: Program will be posted to the web for the Program Committee to review. |
Review the placement of your sessions as decided at the sorters meeting.

February 2: The Program Committee's review and corrections must be completed

February 12: April program goes public after incorporating Committee edits

February 16: Post-deadline abstracts due. Assigned to posters if space available.

March 2: Early registration deadline

Program Committee Jobs

- 1. Immediate Help for the April Meeting
 - 1. Assign committee members to the sorting categories
 - 2. Get permissions (and instructions) to look at the abtract submissions
 - 3. Pro-actively investigate/encourage abstract submission in your category
 - 4. Assign chairs to the sessions before the sorter's meeting
- Attend April meeting if possible and join the executive business meeting Remote participation should be possible.
 Satellite meeting of just the program committee
- 3. Consider the broader mission of the Program Committee
 - 1. Mission statement
 - 2. Presence on the website
 - 3. By laws including nomination, terms, election
 - 4. Jobs within the committee
- 4. Help with the NEXT April meeting (Joint with March Boston 2019)

Program Committee Mission

How can this committee encourage a more active membership in DPF

April meeting might be a place to start:

Compare to the March meeting for condensed matter or AAS for Astrophysics

These provide a forum for an entire community to get together and explore not only the physics, but also other issues that impact the community e.g. Mental health issues, grad student advancement, funding shortfalls, public policy.

When DOE and NSF want to get community input, they should come to us.

Only works if we can provide an organized and proactive community .

Right now, we tend to be led by the funding agencies

Snowmass Process is another obvious way to begin building a community-driven physics roadmap.

Other ideas?????

Sorters Meeting

The sorters meeting for the April meeting program will take place Friday, January 19, 2018 at APS Headquarters located in the American Center for Physics, One Physics Ellipse, College Park, MD 20740. Program Chairs and unit representatives sort contributed papers into sessions. At least one representative from each unit is expected to stay for the entire sorters meeting to ensure that the unit's sessions are completely and accurately placed prior to departure. This is also the time to complete identification and confirmation of chairs for all of the unit's sessions.

Please note that all costs associated with unit representatives' travel to the sorters meetings are charged to the respective units.

Unit Business/Executive Committee Meetings

Please be prepared to schedule your unit's business meeting at the Sorters Meeting on January 19, 2018. Business meetings traditionally take place on Monday evening at the April Meeting. This information will appear in both the electronic and print versions of the Bulletin. In addition, you may choose to have an executive committee meeting during the Meeting.