October 2025 DPF Newsletter

Dear DPF members,

Please find below the monthly DPF newsletter for October 2025. This newsletter will be archived on the DPF website. If you would like an announcement included in the November 2025 newsletter, please contact the DPF Secretary/Treasurer. Please keep requests to 300 words and submit them by the **10th of the month** for consideration.

DPF is the primary community organization for particle physicists in the United States. You can directly support our activities by making a donation at this link (log in with your APS credentials).

Best wishes,

Ken Bloom, DPF Secretary/Treasurer, kenbloom@unl.edu

DPF Executive Committee statement on changes to HEPAP
DPF election closes October 31!
Congratulations to the 2025 DPF APS Fellows
Next DPF Virtual Community Meeting: December 18-19
Abstract Submission for APS26 Global Physics Summit
Applications open for DPF grants for students and caregivers to attend 2026 APS Global Physics Summit
DPF Plenary Speakers at GPS 2025 Global Physics Summit
Save the Date: DPF26
4th International Symposium on the History of Particle Physics to be held at CERN
Symposium in honor of Joel Butler, November 21, 2025
Flavoured Circular Collider Workshop (Flavours@FCC)
Second Annual Neutrinos from Home Conference
December 2-5, 2025

DPF Executive Committee statement on changes to HEPAP

On Sept. 30, we were informed that the DOE Office of Science was consolidating six separate advisory panels (HEPAP, NSAC, etc.) into a combined Office of Science Advisory Committee (SCAC) (https://www.energy.gov/science/articles/doe-establishes-office-science-advisory-committee).

Although now outdated, this quote from their website summarizes HEPAP's impact: https://science.osti.gov/hep/hepap - Oct. 8, 2025)

> "The High Energy Physics Advisory Panel (HEPAP) has advised the Federal Government on the national program in experimental and theoretical high energy physics (HEP) research since its inception in 1967. Since October 2000, the Panel now has joint ownership and continues to be chartered by the Department of Energy (DOE) and reports directly to the Associate Director, Office of High Energy Physics, Office of Science (DOE), and the Assistant Director, Mathematical & Physical Sciences Directorate (NSF), under the guidelines established by the Federal Advisory Committee Act (FACA). DOE and NSF continue to enhance their existing partnership in advancing HEP research and work together to support the ongoing U.S. leadership in this forefront research."

Over the years, HEPAP and its subpanels have convened experts from the scientific community to help determine the strategic directions for the field. DOE Office of Science and the National Science Foundation have also collaborated with DPF in mounting a series of in-depth "Snowmass" studies starting in 1982. This close coordination is particularly important in our field as we rely on complex, internationally shared facilities for our research. Developing such long-term facilities requires hard choices among different initiatives. This process of prioritization through coordination between the advisory panels and community input has been very effective as evidenced by the recent P5 reports.

We do not yet know the composition or charge of the combined SCAC committee. Will it retain the current practice of having frequent field-specific sub-panels such as P5? Will SCAC meetings have enough time for useful discussion between the agencies and scientific community? Most importantly, we need to preserve the community-driven structure of "Snowmass" studies that have been providing input to the agencies through HEPAP and P5.

HEPAP has served our field both as an advisory body and as a valuable forum for cross-field communication. We believe an HEP-specific channel for communication is still needed. DPF will continue to provide such a channel of communication and to continue our advocacy for US-based and global HEP. During the 2025 hiatus in HEPAP meetings, the Division of Particles and Fields hosted a virtual community meeting which was well attended and useful. We plan to host another such virtual meeting on December 18 and 19, 2025 and will be holding our in-person DPF meeting at Fermilab from July 20-24, 2026. There will be ample opportunity for discussion and questions from the community. We hope you will join us. Your membership in DPF and APS is appreciated.

Heidi Schellman for the DPF Executive Committee

DPF election closes October 31!

The annual DPF Executive Committee election is underway and will close on Friday, October 31. This year we are electing a Vice Chair, a Divisional Councilor, and Members-at-Large, including representatives from the early career and graduate student communities. You should have already received an email from directvote.net with a link to your ballot; if you have not seen it, please check your spam and/or junk folders. We appreciate your participation in the activities of DPF!

Congratulations to the 2025 DPF APS Fellows

The 2025 APS Fellows were announced on October 10th. Fellowship is limited to 0.5% of the APS membership each year.

Florencia Canelli, University of Zurich
2025 recipient, Division of Particles and Fields Fellowship

For distinguished leadership in physics at the Large Hadron Collider at CERN and for significant contributions to the study of the top quark at the Large Hadron Collider and at the Tevatron at Fermilab.

Anadi Canepa, Fermi National Accelerator Laboratory
2025 recipient, Division of Particles and Fields Fellowship

For pioneering roles in searches for supersymmetric particles; for outstanding leadership at TRIUMF and Fermilab, and on the CDF, ATLAS, and CMS collaborations, including the CMS tracker upgrade for the High-Luminosity LHC and future collider opportunities; and for broad public engagement.

Bertrand Echenard, California Institute of Technology
2025 recipient, Division of Particles and Fields Fellowship

For world-leading searches for hidden sector dark photons, dark Higgs, and other scalars in the GeV mass region with the BABAR detector, and for leading roles in new dark matter searches with LDMX and in the Mu2e experiment to search for charged lepton flavor violation with unprecedented sensitivity.

Fernando Febres Cordero, Florida State University
2025 recipient, Division of Particles and Fields Fellowship

For exceptional work in pioneering ideas for the calculation of scattering amplitudes and developing their application to both collider physics and gravity.

Stefania Gori, University of California, Santa Cruz
2025 recipient, Division of Particles and Fields Fellowship

For seminal contributions to particle physics phenomenology beyond the

Standard Model, particularly the physics of Higgs bosons, neutrinos, and light dark matter, and for inspiring and pioneering experimental efforts to advance the search for new physics phenomena.

Thomas Hartman, Cornell University
2025 recipient, Division of Particles and Fields Fellowship

For fundamental contributions to quantum field theory and the quantum theory of black holes, including a novel understanding of the black hole information paradox and connections between gravity and quantum entanglement.

Gray Rybka, University of Washington
2025 recipient, Division of Particles and Fields Fellowship

For leadership in searches for axion dark matter, achieving unprecedented sensitivity to the more important axion models, and for the development of ultra-sensitive instrumentation enabling experiments such as neutrino mass measurements.

Misao Sasaki, Kavli Institute for the Physics and Mathematics of the Universe
2025 recipient, Division of Particles and Fields Fellowship

For seminal contributions to cosmology and astrophysics, including cosmological perturbation theory and physics of gravitational waves, and for laying the foundation for understanding how quantum perturbations could shape the observed structures in today's universe.

Matthew Toups, Fermilab
2025 recipient, Division of Particles and Fields Fellowship

For wide-ranging and significant contributions to the MicroBooNE experiment, from construction and commissioning of the detector through to the publication of a large body of first-of-their-kind neutrino physics results with liquid argon time-projection chambers.

This is an incomplete list of DPF members recognized by other divisions.

Michael Cooke, U.S. Department of Energy
2025 recipient, Forum on Physics and Society Fellowship

For leadership in coordinating the U.S. particle physics community's efforts to create communications materials that inform the science-interested public and decision makers about the long-term vision for and impact of high-energy physics research.

Victor Daniel Elvira, Fermi National Accelerator Laboratory
2025 recipient, Forum on International Physics Fellowship

For work on understanding and using jet final states, exploring quantum chromodynamics and physics beyond the Standard Model, for software process — especially in GEANT4 and AI and machine learning — that aids global high energy physics research, for fostering international software and computing collaborations, and for promoting inclusivity in science.

Yen-Jie Lee, Massachusetts Institute of Technology
2025 recipient, Division of Nuclear Physics Fellowship

For pioneering measurements of jet quenching, medium response and heavy-quark diffusion in the quark-gluon plasma, and for using electron-positron collisions as an innovative control to understand collectivity in small collision systems.

Gabriel D. Orebi Gann, University of California, Berkeley
2025 recipient, Division of Nuclear Physics Fellowship

For innovative neutrino detectors for fundamental physics, leadership in the development of the next-generation neutrino experiments, and contributions to the precision studies of solar neutrinos.

Mark A. Palmer, Brookhaven National Laboratory
2025 recipient, Division of the Physics of Beams Fellowship

For outstanding leadership and technical contributions, including driving the MICE experiment to the successful demonstration of ionization cooling, that have brought the design and development of muon colliders closer to their practical realization.

Abid Patwa, U.S. Department of Energy

2025 recipient, Forum on International Physics Fellowship

For leadership as a program manager at the Department of Energy, enabling significant advances in the areas of collider particle physics at CERN, and for developing multiple international agreements furthering U.S. science.

Breese Quinn, University of Mississippi
2025 recipient, Forum on Physics and Society Fellowship

For tireless advocacy on behalf of the U.S. high energy physics community, including leadership in building support for physics funding through personal and community outreach to Congressional delegations and appropriations staff.

Herman B. White Jr., Fermi National Accelerator Laboratory
2025 recipient, Forum on Physics and Society Fellowship

For inspiring leadership and advocacy for physics, science education, and communication with policy makers, governments and the public, and for outstanding contributions to several areas of high energy physics.

Next DPF Virtual Community Meeting: December 18-19

DPF will host another Virtual Community Meeting on December 18 and 19. A website for the meeting will be announced later. Pre-registration is required for Zoom access.

All community members are welcome to suggest topics to Heidi Schellman (heidi.schellman@oregonstate.edu), Sarah Eno (eno@umd.edu), and Sally Seidel (seidel@unm.edu).

The July 31/Aug 1 meeting now has a more complete list of slides and recordings at:

DPF Community Meeting Agenda (slides)
DPF Community Playlist (video)

Abstract Submission for APS26 Global Physics Summit

The next Global Physics Summit (formerly the April Meeting) will be held March 15-20, 2026 in Denver, Colorado. Abstracts for contributed presentations will be due on **October 23, 2025**. More information can be found at https://www.aps.org/about/partner/global-physics-summit-2026.

The annual Business Session of the Division of Particles and Fields will be held on Wednesday, March 18 during the lunch period; more information to follow.

Applications open for DPF grants for students and caregivers to attend 2026 APS Global Physics Summit

The call for abstracts for the 2026 APS Global Physics Summit is now open through October 23, 2025. Please visit the Summit abstract page for more details.

The applications for DPF grants for students and caregivers to attend 2026 APS Global Physics Summit are open for submissions. **The deadline to complete either application is November 15, 2025.**

DPF Grants for Students to attend APS Global Physics Summit

The Division of Particles and Fields (DPF) will provide partial support for a limited number of students to attend the APS Global Physics Summit. Due to limited available resources, not all applications may result in an award.

The award will be up to $500 in reimbursement for costs of attending the conference.
To be considered for this support please complete this **application form** **by November 15, 2025 (11:59 PM ET).**

Eligibility and Application Requirements

To be eligible for the award, a student must:

- Be presenting a paper or poster in-person
- Must be an undergraduate or graduate student at a U.S. educational institution.
- Applicants must be members of DPF
    - One may join APS and DPF here
    - Details on a free one-year student trial APS membership can be found at the Student Membership web page). Students can join the DPF unit when they apply for APS membership.
- Preference will be given to students who do not have support from another APS division.

The application includes:

- A statement of purpose
- Institutional affiliation
- The abstract number and title of the paper or poster to be presented at the meeting
- The contact information for the student's faculty supervisor for them to provide a letter of recommendation (uploaded by them directly to the application system by the deadline).

Please note that requests received after the deadline will not be considered.

Caregiver Awards for APS Global Physics Summit

The Division of Particles and Fields (DPF) will provide support for caregiving expenses, in the amount of up to $500, to a limited number of DPF members who will speak in person at the APS Global Physics Summit.

Caregiving expenses could include local costs for child or elder-care or partial travel costs for dependents/caregivers to allow the speaker to fully participate in the meeting. Applications should describe the type of care needed and an estimated cost.

To be considered for this support, please complete the **application form** **by November 15, 2025 (11:59 PM ET).**

Eligibility and Application Details

Applicants must be members of DPF (one may join APS and DPF here). Applicants who are not DPF members will not be considered.

Applications must include:

- Your abstract number and title
- An applicant statement
    - Statements that address the applicant's caregiver duties as they relate to conference participation will be ranked more favorably.
    - Preference will be given to applicants in the early stages of their careers.

Please note that requests received after the deadline will not be considered.

Deadline Details

All applications are due by November 15, 2025. Applicants will be notified of their status by the second week of December 2025.

For more information, please see the DPF Prizes & Awards Engage page. If you have any questions regarding the application process, please contact honors@aps.org.
Guided by our core values, APS encourages nominations that reflect the full range of talent, distinction, and experience in our field, and supports broad canvassing for professionals across diverse backgrounds, perspectives, and expertise.

DPF Plenary Speakers at GPS 2025 Global Physics Summit

session	talk title	speaker name	speaker institution
Minisymposium: Noble liquid in particle physics	overview of noble liquid detectors	Jonathan Asaadi	University of Texas Arlington
	New results on solar neutrino and light dark matter searches with the LUX-ZEPLIN Experiment	Ann Wang	SLAC
Minisymposium: Lattice QCD and other Gauge Theories	overview of lattice qcd and other gauge theories	Thomas Blum	University of Connecticut
Minisymposium: BSM Probes at Neutrino Facilities	overview of BSM probes at neutrino facilities	matheus hostert	University of Iowa
Minisymposium: Toponium and heavy flavor spectroscopy	overview of toponium	Christian Schwanenberger	DESY
Minisymposium: Advances in Computing in HEP,	Overview of advances in computing in hep	Peter Elmer	IRIS-HEP/Princeton
Minisymposium: Higgs Factories	overview of higgs factories	Charles C. Young	SLAC
Minisymposium: Muon Collider	Overview of muon colliders	Karri DiPetrillo	U. Chicago
Minisymposium: Advances in axion physics	Overview of axion physics	Dan Zhang	U. Washington
Minisymposium: Systematic errors in neutrino experiments	Overview of systematic errors in neutrino experiments	Raquel Castillo	UT-Arlington
Minisymposium: Particle dark matter	Overview of particle dark matter	Benjamin Lehmann	MIT
Minisymposium:Higgs self couplings	Overview of Higgs self couplings	Cecilia Tosciri	U. Chicago
Minisymposium: 90 Years of Muons: History and Horizons	Overview of the history of muons	Lee Roberts	Boston
Minisymposium: HL-LHC detector upgrades	Overview of HL-LHC detector upgrades	Christopher Neu	University of Virginia
Searches for Dark Matter	Wave-Like Dark Matter	Stefan Knirck	Harvard
	Particle-Like Dark Matter	Abby Kopec	Bucknell
	Probes of dark matter	Tracy Slatyer	MIT
New phenomena at Colliders	(a few) Exciting Searches at LHC	Jeff Shahinian	U. Pennsylvania
	New directions in physics beyond the Standard Model theory	Elias Bernreuther	UC San Diego
	Top-antitop bound states	Yang Bai	U. Wisconsin
Artificial Intelligence/Machine Learning and Quantum Information for Particle Physics	AI advances in theoretical high-energy physics	Konstantin Matchev	U. Alabama
	Opportunities in AI/ML for Particle Physics	Phil Harris	MIT
	Quantum sensors for HEP	Matt Pyle	Berkeley
Future Prospects for Neutrino Physics	DUNE CP and Past Phase I: Modules of Opportunity and New Physics	Stephen Parke	Fermilab
	Beam Dump Experiment overview	Vedran Brdar	Oklahoma State
	Future Prospects at Short Baselines	Matt Toups	Fermilab
The Physics of Particle Flavor	LHCb Highlights	Eluned Anne Smith	MIT
	Belle II Highlights	Jake Bennett	University of Mississippi
	Lattice QCD for Heavy Flavor Physics	William Jay	Colorado State University
Collider-based studies of particle physics	W mass, and precision electroweak: status and prospects	Yongbin Feng	Texas Tech
	Particle physics measurements at the EIC	Alessandro Tricoli	BNL
	status of higher order predictions for electroweak observables	Fernando Febres Cordero	Florida State
Particle physics: formal theory	Non-invertible symmetries	Shu-Heng Shao	MIT
	Black holes	Luca Iliesiu	Berkeley
	S-matrix bootstrap	Sebastian Mizera	Columbia
The Higgs Boson	Higgs properties, incl. fermion and boson couplings	Philip Chang	U. Florida
	status of Higgs calculations at hadron collider	Bernhard Mistlberger	SLAC
	searches for new physics in higgs decays	Ben Carlson	
Next generation instrumentation for particle physics	Sensor networks and future applications	M Garcia-Sciveres	LBNL
	Innovative calorimetry	Grace Cummings	FNAL
	4-D solid-state detectors	Artur Apresyan	FNAL
Some near-term aspects of the future of particle physics and collider physics	The Washington Trip	Kiley Kennedy	Princeton
	european strategy update	Anadi Canepa	FNAL
	the physics of future Higgs factories	Matthew McCullough	CERN
muons	Muon g–2: the Final Measurement from Fermilab E989	Lawrence Gibbons	Cornell
	Neutrino Measurements at a Muon Collider	Zahra Tabrizi	Pittsburgh
	MEG-II and Muon CLFV	Atsushi Oya	University of Tokyo
HEP reports	National Academy report	Maria Spiropulu	Caltech
	FCC feasibility study	Michael Benedikt	CERN
	muon collider	Jeff Eldred	FNAL

Save the Date: DPF26

The 2026 edition of the APS Division of Particles and Fields (DPF) meeting will be held at Fermilab on July 20-24, 2026. More information to come!

4th International Symposium on the History of Particle Physics to be held at CERN

Following in the mold established by precursors at Fermilab and SLAC, the 4th International Symposium on the History of Particle Physics will bring together leading physicists who have worked in the field with historians, philosophers and other scholars of science who study the discipline. The focus of this symposium will be upon the important discoveries and intellectual currents of the 1980s and 1990s — a period in which Europe and especially CERN became the acknowledged center of gravity in particle physics. Theoretical, experimental and accelerator physics developments will be examined, as well as the marriage of particle physics with cosmology and astrophysics. This symposium will occur at CERN on 10-13 November 2025.

Further details and registration information can be found at https://indico.cern.ch/event/1480892/.

Symposium in honor of Joel Butler, November 21, 2025

Dear Colleagues,

We are pleased to announce a symposium, celebrating four decades of particle physics at Fermilab and CERN to which Fermilab Distinguished Scientist and former CMS Spokesperson Joel Butler has made significant contributions. The symposium will take place on Friday, November 21, 2025 and will be held from 9 am to 5 pm US CDT with an optional no-host dinner to follow.

For more details and to register for the event, please visit:
https://indico.fnal.gov/e/joelbutler

If you have any questions, please contact me at boj@fnal.gov.

Sincerely,

Bo Jayatilaka on behalf of the symposium organizing committee:

Pushpa Bhat
Lothar Bauerdick
Harry Cheung
Peter Garbincius
Jim Hirschauer
Bo Jayatilaka
Patty McBride
Isobel Ojalvo
Margaret Votava

Flavoured Circular Collider Workshop (Flavours@FCC)

Dear colleagues,

Please be informed of the launch of the 'Flavoured Circular Collider Workshop' (aka `Flavours@FCC'), which is an extended programme of study to improve our understanding of the flavour-physics potential of the FCC. As a joint endeavour between experimentalists and theorists, the Workshop will investigate the physics reach of both established and new methods, as well as the interplay between flavour observables and the other physics sectors of the FCC programme. A particular focus will be to understand the requirements on the emerging detector concepts for FCC-ee.

The Workshop will begin with a three day kick-off event at CERN on Nov 19-21. Follow-up (in-person and zoom) events are foreseen for 2026 and 2027, with intermediate zoom meetings. More information can be found on the webpage https://indico.cern.ch/event/1588013/, including information on the various Working Groups and mailing lists.

The Workshop is open to all members of the HEP community, including those with no prior involvement in FCC activities. We are keen to attract both senior scientists and early-career researchers.

Best wishes,

Gino Isidori (gino.isidori@uzh.ch)
Stephane Monteil (monteil@in2p3.fr)
Guy Wilkinson (guy.wilkinson@cern.ch)
Zoltan Ligeti (ligeti@berkeley.edu)

Second Annual Neutrinos from Home Conference
December 2-5, 2025

Dear Colleagues,

We are very happy to announce *Neutrinos from Home 2025*, which will be held from 2–5 December.

Neutrinos from Home is an online physics conference built around interesting and engaging discussion. Talks are pre-recorded and released in advance, so conference time is devoted entirely to live and asynchronous discussions, including themed sessions proposed by participants. You can take part at your own pace and join from wherever you feel at home.

The conference will bring together theorists and experimentalists in the high energy, cosmology and astrophysics communities from around the world to discuss the current state of neutrino physics. Confirmed speakers are listed on the website.

Registration is now open: https://neutrinos.discussingresearch.com/registration/. **Abstracts submitted by 4 November at 23:59 UTC will receive equal consideration.**

Note that participation is encouraged by all members of the community, including students and early career scientists.

We look forward to seeing many of you at Neutrinos From Home 2025!

Cheers,

Olivia Meredith Bitter, Adriano Cherchiglia, Shaun Hotchkiss, Gabriele Montefalcone, Justin Mueller and Matthijs van der Wild (*Neutrinos from Home* organizers)