November 2025 DPF Newsletter

Dear DPF members,

Please find below the monthly DPF newsletter for November 2025. This newsletter will be archived on the <u>DPF website</u>. If you would like an announcement included in the December 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/DPB Input to European Strategy for Particle Physics Update

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December 2-5, 2025

DPF/DPB Input to European Strategy for Particle Physics Update

André de Gouvêa, Hitoshi Murayama, Mark Palmer and Heidi Schellman prepared a document for the European Strategy update that describes recent planning processes in the US. We received 13 comments from the community which greatly improved the document. You can find the submitted document here.

Thanks to everyone who contributed.

DPF election results

Thank you to all who participated in the recently concluded DPF election; this year's turnout was 22.75%. We are grateful to all the candidates and we thank the Nominating Committee for selecting an outstanding slate of candidates.

Congratulations to these new DPF Executive Committee members whose terms will start January 1, 2026:

- Vice Chair: Kate Scholberg (Duke University)
- Divisional Councilor: Robert Bernstein (Fermilab)
- Executive Committee Members-at-Large: Amanda J. Weinstein (Iowa State University),
 Gary Shiu (University of Wisconsin-Madison)
- Early Career Member: Pouya Asadi (UC Santa Cruz)
- Graduate Student Member: Monica Leys (University of Pittsburgh)

We thank these Executive Committee members whose terms will be ending at the end of 2025 for all of their efforts: André de Gouvêa (Past Chair), Vaia Papadimitriou, Mark Messier (Members at Large), Saptaparna Bhattacharya (Early Career Member), Olivia Bitter (Student Member), and Tulika Bose (Past Secretary/Treasurer).

2026 DPF Prize and Award winners

We congratulate DPF members who won 2026 APS prizes and awards, both society-wide and at the unit level:

Julius Edgar Lilienfield Prize

Hitoshi Murayama, University of California, Berkeley; Kavli IPMU, University of Tokyo; Lawrence Berkeley National Laboratory

For contributions to theoretical and experimental particle physics, as well as inspirational public outreach and effective science advocacy.

W.K.H. Panofsky Prize in Experimental Particle Physics

Joel Butler, Fermi National Accelerator Laboratory

For wide-ranging scientific, technical, and strategic contributions to particle physics, particularly exceptional leadership in fixed target quark flavor experiments at Fermilab and collider physics at the Large Hadron Collider.

J. J. Sakurai Prize for Theoretical Particle Physics

John F. Donoghue, University of Massachusetts, Amherst

For original and lasting contributions to the development of effective field theories, including work on gravity as an effective quantum field theory, and important contributions to chiral perturbation theory.

Meenakshi Narain Mentoring Award

Kevin P. Lannon, University of Notre Dame

For mentoring and leadership in reforming graduate admissions by championing evaluation criteria that value perseverance, resilience, and drive alongside academic rigor, thereby broadening access while upholding excellence.

Henry Primakoff Award for Early-Career Particle Physics

Elena Pinetti, Flatiron Institute (Simons Foundation)

For original ideas and innovative research in the study of particle dark matter, compact astrophysical objects, high energy astrophysical sources, and cosmic radiation across the electromagnetic spectrum.

Feshbach Prize Theoretical Nuclear Physics

Martin J. Savage, University of Washington

For pioneering contributions to computational quantum chromodynamics for nuclear physics, especially through large-scale lattice quantum chromodynamics simulations, and for exploring applications of quantum computing.

Dannie Heineman Prize

Charles B. Thorn III, University of Florida

For fundamental contributions to elementary particle physics, primarily the theory of strong interactions and the development of string theory.

Congratulations to all, and apologies to any DPF members we might have missed!

Next DPF Community Meeting December 18-19, 2025

An agenda and registration information for the next DPF Community Meeting can be found at https://indico.global/event/15767/. The meeting will be held on Zoom, and attendees must register by midnight ET on December 16 to participate. We look forward to having you join us.

Heidi Schellman (<u>schellmh@oregonstate.edu</u>) Sally Seidel (<u>seidel@unm.edu</u>)

Update on Theory Postdoc Accord

The theoretical high energy physics community has operated under a common postdoc acceptance deadline since 2007. Recent challenges to this consensus led the APS DPF Executive Committee to form an ad hoc panel in 2024 to re-examine the issue of a common deadline for theory postdoc offers. The panel (chaired by Csaba Csaki alongside Vijay Balasubramanian, Alejandra Castro, Nathaniel Craig, Mariangela Lisanti, Hirosi Ooguri, and Shufang Su) conducted an extensive survey last fall yielding more than 800 responses from 6 continents. The results were presented at a town hall meeting in October 2024, followed by an extended comment period on the committee's report before it was submitted to the DPF Executive Committee for approval. The report's recommendation of a January 31 deadline has been adopted by more than 150 research groups throughout the world. Details of the new consensus accord can be found at

https://www.classe.cornell.edu/research/theory/january-31-high-energy-theory-postdoc-accord

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
particle physics	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	Al - duranti al disensi di selezioni di sele	Kamatantin Mataka	II. Alabassa
Information for Particle Physics	All advances in theoretical high-energy physics	Konstantin Matchev Phil Harris	U. Alabama MIT
	Opportunities in Al/ML for Particle Physics 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
0-111-1	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
7.15.0	Black holes	Luca Iliesiu	Berkeley
	S-matrix bootstrap Higgs properties, incl. fermion and boson	Sebastian Mizera	Columbia
The Higgs Boson	couplings	Philip Chang	U. Florida
	status of Higgs calculations at hadron collider searches for new physics in higgs decays	Bernhard Mistlberger Ben Carlson	SLAC
Next generation instrumentation	ocurones for new priyates in higgs decays	DOI GAIRON	
for particle physics	Sensor networks and future applications	M Garcia-Sciveres	LBNL
	Innovative calorimetry	Grace Cummings	FNAL
0	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
contact physics	european strategy update	Anadi Canepa	FNAL
	the physics of future HIggs factories	Matthew McCullough	CERN
	Muon g–2: the Final Measurement from	Lawrence Gibbons	Cornell
muons	Fermilab E989	Lawrence Gibbons	
muons		Zahra Tabrizi	Pittsburgh
muons	Fermilab E989		
muons HEP reports	Fermilab E989 Neutrino Measurements at a Muon Collider	Zahra Tabrizi	Pittsburgh
	Fermilab E989 Neutrino Measurements at a Muon Collider MEG-II and Muon CLFV	Zahra Tabrizi Atsushi Oya	Pittsburgh University of Tokyo

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!

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 <u>Neutrinos from Home 2025</u>, 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)