Dear DPF members,

Please find below the monthly DPF newsletter for August 2022. This newsletter will be archived on the DPF website. If you would like an announcement included in the September 2022 newsletter, to be sent out around mid-September, please contact the DPF Secretary/Treasurer. Please keep requests to 300 words and submit them by the 10th of the month for consideration.

Tulika Bose, Secretary/Treasurer, tulika@hep.wisc.edu
Julia Gonski, Early Career Member, julia.lynne.gonski@gmail.com

Snowmass Report: It's done, it was great, and now for P5…

Call for DPF Executive Committee Nominations
Call for Nominations for P5
Call for Nominations for APS/DPF Awards
  J. J. and Noriko Sakurai Dissertation Award in Theoretical Particle Physics
  Mitsuyoshi Tanaka Dissertation Award in Experimental Particle Physics
  DPF Instrumentation Awards
  DPF Mentoring Award

HEPAP International Benchmarking Panel

Elementary-particle Physics: Progress and Promise (EPP2024)

New Graduate Student representative on the DPF Ethics Advisory Committee

Bulletin: PIXEL 2022
Snowmass Report: It’s done, it was great, and now for P5…

The Seattle Snowmass Community Study and Workshop was held successfully from July 17-26, 2022, on the campus of the University of Washington. Approximately 700 participants attended all or part of the workshop in person, and there were more than 650 virtual registrants. The daily program typically started at 8am and ran until 7pm. Days 2-8 were packed with parallel sessions in the mornings and three 90-minute-plenary sessions in the afternoons. Day 1 and days 9 and 10 consisted of all-plenary sessions that included special presentations of plans and planning processes by many leaders of US and international institutes and laboratories, including Fabiola Gianotti, CERN; Masanori Yamauchi, KEK, Japan; Yifang Wang, IHEP, China; and Lia Merminga, Fermilab, US.

The Snowmass meeting provided the first large gathering of the US HEP community since the onset of the COVID-19 pandemic. For many attendees, the meeting was their first in-person conference in more than two years, and many expressed how much they enjoyed being able to interact with colleagues. Snowmass participants were extremely supportive of the COVID protocols enforced, including mandating vaccination to attend and masking at all indoor meetings, and these precautions appear to have been successful: though some cases of COVID were reported during (and just after) the workshop, only about 5% of attendees tested positive despite the ongoing Omicron surge.

The workshop was the culmination of almost two years of work on the Snowmass process, during which more than 2000 physicists from all over the world contributed to over 500 whitepapers to the ten “frontiers”: Accelerator, Cosmic, Community Engagement, Computing, Energy, Instrumentation, Neutrino, Rare Processes and Precision Measurements, Theory, and Underground Facilities and Infrastructure. An organization of Early Career physicists helped bring the issues of our young people into the study.

A full schedule for the meeting can be found on the Snowmass Indico site, which includes links to the slides for talks, Google Documents where participants asked questions and received answers which could not be addressed in real time, and which will include links to video recordings of the talks (a work in progress!).

The Snowmass workshop also provided the opportunity for the community to learn about two additional national studies which are beginning their work. First, in a talk on Tuesday, July 26, Bonnie Fleming (Yale) and Patricia McBride (FNAL) described the membership and work of the International Benchmarking HEPAP Subpanel which they chair. Subsequently, Maria Spiropulu (Caltech) and Michael Turner (U Chicago) spoke about the membership and work of the National Academy of Sciences study “Elementary Particle Physics 2024: Progress and Promise”
(EPP2024) which they lead. Both of these studies encourage input from the community, and information on how to participate can be found in the talks linked above.

At the close of the meeting, Priscilla Cushman of the University of Minnesota put it all in perspective with her inspiring “Community Summer Study and Workshop Synthesis”. Then, as the audience held its breath, JoAnne Hewett of SLAC National Accelerator Laboratory and chairperson of the US High Energy Physics Advisory Panel (HEPAP), announced that the new P5 chairperson will be Berkeley professor Hitoshi Murayama.

The output of the Snowmass process, including the voluminous whitepaper contributions, topical group reports, and input from discussions at the meeting itself, are now being distilled into Frontier reports which, together with an overall summary report, will then be provided to P5 by the end of October. It is anticipated that P5 will then provide its report to HEPAP by late spring or early summer of 2023.

We wish to acknowledge the work of the University of Washington Local Organizing Committee, and especially the contributions of Gordon Watts and Shih-Chieh Hsu who led the committee, as well as Elise Novitski, Quentin Buat, and Jason Detweiler, for running an outstanding workshop under difficult circumstances. We thank four units of APS whose work is closely related to HEP, namely Astrophysics, Nuclear Physics, Physics of Gravity, and especially the Physics of Particle Beams, for their many contributions to this Snowmass. Finally, we express our thanks and admiration to the Snowmass community, who produced great physics studies despite the many challenges of this period.
Call for DPF Executive Committee Nominations

Nomination Deadline: 30 September, 2022

The Division of Particles and Fields of the American Physical Society will soon conduct its annual elections for the Executive Committee. To help ensure that the slate of candidates represents the full breadth of the diverse DPF community, the DPF Nominating Committee is seeking suggestions for the following positions:

- The Vice Chair (first year of four-year Vice-Chair/Chair-elect/Chair/Past-Chair rotation)
- Two Members-at-large (3-year terms)
- One Early Career member (1-year term)

The Nominating Committee would particularly like to encourage suggestions for the Early Career member position. These candidates should be at the post-doctoral level.

Please send your suggestions via email to Sally Dawson, Chair of the Nominating Committee (sdawson@bnl.gov) with DPF in the subject line. In addition to the candidate’s name (and e-mail address), please indicate which position(s) you are suggesting the candidate for and a short summary of the candidate’s qualifications. Nominators are not required to be members of DPF but nominees must be at the time of the election. Self-nominations are very welcome.

Suggestions received before 5:00 p.m. EDT on Friday 30 Sept, 2022 will receive full consideration.

More details about current officers and related governance information can be found on the DPF website.

The membership of APS is diverse and global, and the Executive Committees of APS Units should reflect that diversity so that all voices are involved and empowered to have an impact on our community. Nominations of members belonging to groups traditionally underrepresented in physics, such as women, LGBT+ scientists, scientists who are Black, Indigenous, and people of color (BIPOC), disabled scientists, scientists from institutions with limited resources, and scientists from outside the United States, are especially encouraged. Students and early career members are also encouraged to participate in all unit leadership committees.

Thank you and best wishes,

Sally Dawson

Chair of the DPF Nominating Committee
Call for Nominations for P5

Nomination Deadline: August 31, 2022

Following the successful Snowmass Community Summer Study, the next Particle Physics Project Prioritization Panel (P5) will be formed as a HEPAP subpanel. P5 will consider the long-term strategic roadmap for the U.S. particle physics program under realistic budget scenarios. Prof. Hitoshi Murayama, UC Berkeley, will serve as chair of the next P5.

We solicit nominations from the community for members of the next P5. Serving on P5 is an important responsibility and requires a broad view and dedication to the process from each panel member. Community engagement is critical to the success of P5 and we encourage you to send nominations of people you think would best serve our field.

Please send your nominations to pfive@slac.stanford.edu by Aug 31. We thank you in advance!

Best Regards,
JoAnne Hewett, Chair, HEPAP
Hitoshi Murayama, Chair, P5
Call for Nominations for APS/DPF Awards

J. J. and Noriko Sakurai Dissertation Award in Theoretical Particle Physics

Nomination Deadline: September 30, 2022

This award recognizes exceptional early-career scientists who have performed original doctoral thesis work of outstanding scientific quality and achievement in theoretical particle physics. The annual award consists of $1,500, a certificate, travel reimbursement of up to $1,000, and a registration waiver to receive the award and give an invited talk at the APS April Meeting of the APS Division of Particles and Fields (DPF), or a DPF session at APS April Meeting.

Learn more and nominate a colleague now...

Mitsuyoshi Tanaka Dissertation Award in Experimental Particle Physics

Nomination Deadline: September 30, 2022

This award recognizes exceptional early-career scientists who have performed original doctoral thesis work of outstanding scientific quality and achievement in experimental particle physics. The annual award consists of $1,500, a certificate, travel reimbursement of up to $1,000, and a registration waiver to receive the award and give an invited talk at a meeting of the APS Division of Particles and Fields (DPF), or a DPF session at APS April Meeting.

Learn more and nominate a colleague now...

DPF Instrumentation Awards

Nomination Deadline: September 15, 2022

The DPF Instrumentation Award and DPF Instrumentation Early Career Award are bestowed annually to honor exceptional contributions to instrumentation advancing the field of particle physics through the invention, refinement, or application of instrumentation and detectors.

The DPF Instrumentation Award recognizes outstanding achievements in particle physics instrumentation that have had a major impact on the field through the awardee’s dedication over a substantial portion of an entire career, while the DPF Instrumentation Early Career Award recognizes achievements having a significant impact at an early career stage. For the purpose of
this award, the early career stage is taken to be approximately 15 years from a Ph.D. or other terminal degree, with due account for interruptions and other factors in nominees’ careers.

Award recipients will be invited to present a lecture at the 2022 CPAD meeting.

Learn more and nominate a colleague now…

DPF Mentoring Award
Nomination Deadline: September 30, 2022

The Division of Particles and Fields of the American Physical Society has established an award to honor exceptional mentoring, broadly defined, to be bestowed annually. This APS Unit Award is intended to recognize DPF members who have had an exceptional impact as mentors of particle physics scientists and students. This mentoring could be through teaching or research or science-related activities and is meant to recognize current achievements as well as those spanning a career.

Examples of contributions honored by this award include:
- Exceptional mentoring of early career particle physicists
- Sustained commitment to mentoring early career particle physicists from traditionally under-represented backgrounds
- A leadership role in developing early career research and career development activities

The award consists of a certificate indicating the citation chosen by the selection committee, to be awarded at the next DPF Meeting. DPF will reimburse reasonable travel expenses for travel to the award ceremony.

Learn more and nominate a colleague now…

The membership of APS is diverse and global, and the nominees and recipients of APS Honors should reflect that diversity so that all are recognized for their impact on our community. Nominations of members belonging to groups traditionally underrepresented in physics, such as women, LGBT+ scientists, scientists who are Black, Indigenous, and people of color (BIPOC), disabled scientists, scientists from institutions with limited resources, and scientists from outside the United States, are especially encouraged.
HEPAP International Benchmarking Panel

The International Benchmarking Panel is a HEPAP Subpanel charged by the Department of Energy and the National Science Foundation to consider “the unique international context of particle physics, and how we can best position the U.S. program and its researchers for success” in this context. The Panel will provide input into the upcoming Particle Physics Project Prioritization Panel (P5) acknowledging that a core tenet of the P5 Report is that particle physics is fundamentally a global enterprise and asking how we can develop and improve the US particle physics program to complete the best science of the next decade. The Panel is co-chaired by Patricia McBride and Bonnie Fleming with Panel members drawn from experts across HEP.

A link to the plenary presentation on the Panel at the recent Snowmass meeting can be found here. A link to the charge can be found here.

Feedback is welcome either through email to the Panel chairs, any of the Panel members, or through our feedback portal accessible through the Panel website here. Feedback can be best considered and integrated if received by September 1st.

Patty McBride and Bonnie Fleming, Co-Chairs for the HEPAP International Benchmarking Subpanel
Elementary-particle Physics: Progress and Promise (EPP2024)

The National Academies of Sciences, Engineering, and Medicine (NASEM), at the request of the Department of Energy and the National Science Foundation, convened an ad-hoc committee to

- Identify the fundamental questions in particle physics that could motivate research in the next decade and beyond, irrespective of the tools and techniques to address them.
- Distinguish which of these questions could be addressed with available experimental and theoretical tools in the coming decades and which could require new techniques or approaches.
- Suggest technical research areas that could provide particle physics with new tools needed to enable new techniques and approaches.
- Suggest different ways of thinking and alternative approaches from other areas of science that could be incorporated into and benefit the overall particle physics enterprise.

The Committee, co-chaired by Maria Spiropulu (Caltech) and Michael Turner (Kavli/UChicago), will produce a report estimated to be released by Spring 2024. The EPP2024 website contains the Committee Membership and all publicly available materials, e.g., agendas and materials of open meetings, including its first meeting in Seattle in July 2022. It also includes a call for short Vision Papers that synthesize the vision for the field. The Committee will use as input the work products of Snowmass2021 and the P5-2022 report when available and is already planning to gather additional community input, e.g., through invited speakers and panels at future open meetings, and Town Halls.

The Snowmass-2021 strategy and vision for the field are input to both P5-2022 and EPP-2024. The EPP2024 report will take a longer view, beyond current programmatic and financial constraints, and it will undergo the NASEM report-review process. We expect the report will broadly convey the aspirations and value of the field, resulting in stronger support for particle physics in the coming decades.

Maria Spiropulu and Michael S. Turner
New Graduate Student representative on the DPF Ethics Advisory Committee

On behalf of the DPF Executive Committee (EC), I am very pleased to announce that Iris Ponce Pinto of Yale University has been chosen as the Graduate Student representative on the DPF Ethics Advisory Committee (EAC). Iris’s term starts immediately and runs until December 31, 2023. She succeeds Amber Roepe who has served so effectively in this role since the inception of the EAC. We thank Amber for her outstanding work and wish Iris great success in her new assignment.

The current membership of the EAC is: Ketevi Asssamagan (BNL), Bill Barletta (MIT), Melissa Franklin (Harvard University), Maria Elena Monzani (SLAC), Pavel Fileviez Perez (Case Western Reserve University), Iris Ponce Pinto (Yale University, early career: graduate student), Pekka Sinervo (University of Toronto), Ruth Van de Water (FNAL), Jeremy Wolcott (Tufts University, early career: postdoc).

Joel Butler, DPF Chairperson, for the DPF EC
Registration is now open for PIXEL 2022, which will take place in Santa Fe, New Mexico, USA, December 12-16, 2022. Information about the conference is available at https://physics.unm.edu/Pixel2022/. This conference will cover developments in pixel detectors in nuclear and particle physics, astrophysics, bioscience, and x-ray science, with emphasis on pixel sensor technology and device design, front-end readout electronics, radiation effects on devices, mechanics and integration, calibration, and data processing.

All talks will be plenary, and travel stipends for junior scientists are available. The deadline for abstract submission is September 15, 2022. Please direct questions to pixel2022@unm.edu.