

# February 2020 DPF Newsletter

Dear DPF members,

Please find below the monthly DPF newsletter for February 2020. This newsletter will be archived on the DPF website. If you would like an announcement included in the February newsletter, to be sent out around March 15th, please contact the DPF Secretary/Treasurer. Please keep requests to 300 words and submit them by the **10th of the month** for consideration.

Mirjam Cvetič, Secretary/Treasurer, [cvetic@physics.upenn.edu](mailto:cvetic@physics.upenn.edu)

Rick Van Kooten, Member-at-Large, [rvankoot@indiana.edu](mailto:rvankoot@indiana.edu)

Elizabeth Worcester, Member-at-Large, [etw@bnl.gov](mailto:etw@bnl.gov)

Snowmass Planning and Summer Study.....	2
Snowmass Conveners .....	3
Submit your nominations for the 2020 APS Fellowships.....	4
DPF Grad Slam at the APS April Meeting .....	5
DPF Mentorship Award.....	6
April 2020 APS Meeting Support.....	7
Conference on Neutrino and Nuclear Physics 2020 (CNNP2020).....	8
Instrumentation for Colliding Beam Physics (INSTR20).....	9
Neutrino 2020 .....	10
Phenomenology 2020 Symposium (PHENO 2020) .....	11
LoopFest XIX .....	12
TASI-2020 .....	13
XIV International Conference on Interconnections between Particle Physics and Cosmology (PPC2020) ..	14
2020 MCnet-CTEQ Summer School .....	15

## Snowmass Planning and Summer Study

The Division of Particles and Fields of the American Physical Society has announced the Frontier Conveners of the next HEP Community Planning Exercise (a.k.a. “Snowmass”) and the site and dates of the 2021 Snowmass Summer Study.

Dates and Site for the Summer Study: The dates for the summer study are **July 11-20, 2021**. This workshop will take place at the University of Washington, Seattle, and will be modeled after the successful Snowmass 2013 event. The local organizing committee will be co-chaired by Shih-Chieh Hsu and Gordon Watts.

The Snowmass Community Planning Process is organized by the Division of Particles and Fields of the APS. In order to coordinate efforts across divisions, there are regular meetings of the Steering Group (consisting of the DPF chair line with one selected representative from DAP, DPB, DNP, and DGRAV respectively). A larger Advisory Group is being assembled, which includes the entire elected DPF executive committee, plus international representatives. Snowmass is an opportunity for the entire HEP community to come together to identify and document a vision for the future of particle physics in the U.S. and with its international partners. Workshops will be organized over the next year and a half, culminating in a 2021 summer study that pulls all the work together. Snowmass provides input to HEPAP through its prioritization panel, P5, ultimately producing advice on future projects and scientific programs to the agencies under a set of funding scenarios.

Input to the Process: Your contributions and participation will naturally occur as part of one or more working groups directed by the conveners. There will be a Town Hall meeting during the APS April meeting (**5:30 pm – 7:00 pm on Saturday, April 18**) for us to provide a status report and to receive your feedback: you can participate remotely by ZOOM (details later). You are also welcome to provide input and suggestions on Slack (<https://snowmass2021.slack.com/>). The Snowmass wiki is being revamped and will have pages dedicated to each frontier. We will be assigning moderators to both software platforms and creating a media committee – please email us if interested in helping! If you are an early career scientist, we encourage you to join the “Snowmass Young” mailing list ([snowmass-young@fnal.gov](mailto:snowmass-young@fnal.gov)) by emailing to [listserv@listserv.fnal.gov](mailto:listserv@listserv.fnal.gov) with the body of the message **“Subscribe snowmass-young YOUR NAME”** and with no subject. We aim for everyone’s voice to be heard.

Sincerely,

Young-Kee Kim (DPF Chair)

Tao Han (DPF Chair-Elect)

Joel Butler (DPF Vice-Chair)

Priscilla Cushman (DPF Past Chair)

## Snowmass Conveners

Conveners of Frontiers: We appreciate your strong participation in the Frontier convener nomination process. The selected Frontier conveners are listed below. Over the next three months, they will be meeting together with the Snowmass Steering Group to determine the next steps. The main task before the APS April meeting is for the conveners to revise the initially proposed topics and select topical sub-conveners within their frontiers. All frontiers have three co-conveners, except for Community Involvement, which will follow a different model of engagement due to the very broad range of topics under its umbrella. All sub-conveners need to be approved by the DPF executive committee and their choice should be guided by, but not strictly limited to, the names included in the spreadsheet of nominations that was collected from the community during the original convener nomination process.

Frontier	Co-Conveners		
Energy Frontier	Meenakshi Narain	Laura Reina	Alessandro Tricoli
Frontiers in Neutrino Physics	Patrick Huber	Kate Scholberg	Elizabeth Worcester
Frontiers in Rare Processes and Precision Measurements	Marina Artuso	Bob Bernstein	Alexey Petrov
Cosmic Frontier	Aaron Chou	Marcelle Soares Santos	Tim Tait
Theory Frontier	Nathanial Craig	Csaba Csaki	Aida El-Khadra
Accelerator Science and Technology Frontier	Steve Gourlay	Tor Raubenheimer	Vladimir Shiltsev
Instrumentation Frontier	Phil Barbeau	Petra Merkel	Jinlong Zhang
Computational Frontier	Steve Gottlieb	Oliver Gutsche	Ben Nachman
Underground Facilities and Infrastructure	Jeter Hall	Kevin Lesko	John Orrell
Community Involvement	Ketevi Assamagan	Breese Quinn	

## Submit your nominations for the 2020 APS Fellowships

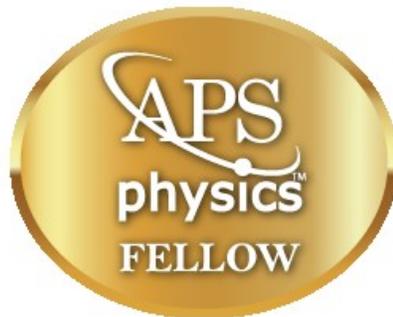
Deadline: **1 April, 2020**

The APS Fellowship Program was created to recognize members who may have made advances in physics through original research and publication or made significant innovative contributions in the application of physics to science and technology. They may also have made significant contributions to the teaching of physics or service and participation in the activities of the Society.

Fellowship is a distinct honor signifying recognition by one's professional peers. Each year, no more than one half of one percent of the Society's membership (excluding student members) is recognized by their peers for election to the status of Fellow of the American Physical Society. The DPF Fellowship committee is receiving nominations for the 2020 DPF Fellows now, and the deadline for submission is April first.

The nomination procedure is straightforward and can be found here:

<https://www.aps.org/programs/honors/fellowships/>



## DPF Grad Slam at the APS April Meeting

Application Deadline: **13 March, 2020**

**Note: Deadline has been extended**

DPF Grad Slam is an APS DPF-sponsored competition designed to showcase graduate student research in three-minute talks. The application deadline is **Friday, March 13**. The finalists for the competition at the April Meeting will be informed on March 20. More info including the application process will be posted at <https://sites.google.com/umich.edu/dpf-gradslam/home>.

**Eligibility:** All graduate students who are DPF members and have submitted abstracts for the 2020 APS April meeting.

**Visuals:** PowerPoint slides with maximum of a few slides. In cases of collaborative research, the presenter's contribution to the project must be salient and clearly specified.

**Timing:** Timing will commence from the moment the student starts talking. Speakers will be cut off at 3 minutes.

**Judging:** The preliminary round will be conducted by a panel of DPF members (faculty members / lab scientists, postdocs and students) based on the application materials: a title and abstract. The finalists will compete live before the panel and April meeting participants during lunch time on **Saturday April 18**.

Presenters are judged on the basis of having a clear and effective presentation that has demonstrable intellectual significance. A score between 1 point (poor) and 5 points (excellent) will be used for each of the following criteria. The total maximum score will be 30 points.

- **Clarity:** Did the speaker provide adequate background knowledge to make the talk and the importance of the project understandable?
- **Organization:** Did the presentation follow a clear and logical sequence?
- **Delivery:** Pace, enthusiasm, confidence, body language, eye contact, etc.
- **Visuals:** Did the slides enhance the presentation and help to emphasize the primary points of the talk? Were the slides well-designed, clear, legible, and concise?
- **Intellectual Significance:** Did the speaker explain why her/his project matters (for example, its significance to the field of particle physics)?
- **Engagement:** To what extent did the talk speak to your intellectual curiosity? Did it make you want to learn more about the topic?

**Winners:** Three winners will receive certificates and 2021 APS memberships.

## DPF Mentorship Award

Nomination Deadline: **1 March, 2020**

The Division of Particles and Fields of the American Physical Society is pleased to announce that the Call for Nominations for the 2020 Mentoring Award is now open.

This APS Unit Award is intended to recognize those 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.

Successful applications have included letters from students, post-docs, and faculty members.

Early career particle physicists include undergraduate and graduate students, postdoctoral scholars, and professionals early in their careers, such as assistant professors or assistant scientists. The award will consist 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.

Nomination packets should consist of at least three but not more than four letters supporting the nomination, a cover letter, and a brief biographical sketch or CV of the candidate. It must also include a list of past and current mentees, as well as their contact information wherever possible. Some past mentees may be contacted during the review process. At least two of the letters should be submitted by individuals who have benefited from the mentoring experience. Nominations must be individual (no team nominations) and only one nomination per candidate will be accepted (no multiple nominations). There are no time limitations on contributions that can be recognized by this award. Nominations will be active and considered for three years.

Nominations for the 2020 award will be accepted through Academic Jobs Online (AJO) through March 1, 2020 at <https://academicjobsonline.org/ajo/jobs/15094>

Click the "Nominate" link and you will be guided through the process. Nominators should submit the cover letter and a biographical sketch or CV along with names and email addresses of the letter-writers. Contact the Committee if you experience difficulties with the site or have questions.

2020 Award Committee:

Bonnie Fleming, Chair, Yale U.

Mirjam Cvetič, U. of Pennsylvania

Ken Heller, U. of Minnesota

Pearl Sandick, U. of Utah

Tim Tait, U of California, Irvine

## April 2020 APS Meeting Support

18—21 April, 2020

Washington, DC

Request Deadline: **3 April, 2020**

Early Registration: **28 February, 2020**

### Child-care Expenses for April 2020 APS Meeting

We are pleased to announce that the Division of Particles and Fields (DPF) will provide support for child-care expenses, in the amount of \$300 to DPF members who will attend the APS Meeting 2020, which will take place from April 18-21, 2020 in Washington, DC. For meeting details, see the meeting website (<https://www.aps.org/meetings/april/index.cfm>).

To be considered for this support please submit an email request to Andre Luiz De Gouvea ([degouvea@northwestern.edu](mailto:degouvea@northwestern.edu)) by **5:00 p.m. PST on April 3, 2020**. The request should include the university affiliation, and the abstract number and title of the paper or poster presented at the meeting.

### Grants for Graduate Students to attend April 2020 APS Meeting

We are pleased to announce that the Division of Particles and Fields (DPF) will provide partial support for a limited number of graduate students to attend the APS Meeting 2020, which will take place from April 18-21, 2020 in Washington, DC. For meeting details, see the meeting website (<https://www.aps.org/meetings/april/index.cfm>).

The award will be up to \$300 in reimbursement for costs of attending the conference, depending on the number of award recipients. To be eligible for the award, a student must be presenting a paper or poster and must be a graduate student at a U.S. educational institution. Applications from graduate students presenting results based on their research will be considered on an individual basis. Applicants must be members (or applicant members) of the DPF. 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.

To be considered for an award, students should submit an email request to Andre Luiz De Gouvea ([degouvea@northwestern.edu](mailto:degouvea@northwestern.edu)) by **5:00 p.m. PST on April 3, 2020**. The request should include their university affiliation, thesis (faculty) adviser, expected date of degree completion, and the abstract number and title of the paper or poster they are presenting at the meeting, and optionally, gender and minority status information. The request should also include a follow-up letter of recommendation from the student's faculty supervisor, to be transmitted by that supervisor to the same email address by the same date. Students from underrepresented groups are strongly encouraged to apply. Please note that requests received after the deadline will not be considered.

Please take advantage of this opportunity to promote student participation in the APS Meeting in Washington, DC

## Conference on Neutrino and Nuclear Physics 2020 (CNNP2020)

24-28 February 2019

Abstract Deadline: 30 October, 2019 - Passed

### Opening of registration & Abstracts extension

The International Conference on Neutrino and Nuclear Physics 2020 (CNNP2020) is the second in the CNNP series and will be held from **24-28 February 2020** in South Africa, hosted by iThemba LABS. This conference will bring the nuclear and neutrino communities together in order to exchange ideas and results and build on the very successful inaugural CNNP conference held in Catania, Italy, in October 2017.

We are pleased to announce that the registration process for CNNP2020 opened on 1 October 2019. Furthermore, please note that the period for abstract submissions has passed.

For more information, including the list of confirmed invited speakers, please visit <https://indico.tlabs.ac.za/event/85/> or contact us at [cnp2020@tlabs.ac.za](mailto:cnp2020@tlabs.ac.za).

Local Organizing Committee, CNNP2020

## Instrumentation for Colliding Beam Physics (INSTR20)

24-28 February, 2020

Registration deadline: 13 January, 2020, **PASSED**

Dear colleague,

We are pleased to inform you that the Conference "Instrumentation for Colliding Beam Physics" (INSTR20) will be jointly organized by the Budker Institute of Nuclear Physics and Novosibirsk State University and held in the Budker Institute, Novosibirsk, Russia in the period from 24 to 28 February, 2020.

Registration is already opened on the website: <http://instr20.inp.nsk.su>

You are kindly invited to participate and register at your earliest convenience. Please also inform all potentially interested colleagues and encourage them to register.

Looking forward to meeting you in Novosibirsk in February 2020.

Organizing Committee

## Neutrino 2020

June 22-27 in Chicago, Illinois, USA  
Early bird registration deadline: **28 February, 2020**

The [XXIX International Conference on Neutrino Physics and Astrophysics \(Neutrino 2020\)](#) will be held June 22-27 in Chicago. Early bird registration for the conference closes on February 28. Hotels will be in very high demand in downtown Chicago during the summer, so conference participants are strongly encouraged to book at the special reduced rate at the [Hyatt Regency Chicago](#) as early as possible. The scientific program will consist of invited plenary talks and contributed poster presentations covering a broad range of topics in neutrino physics. Poster abstract submission is now open. Further information on registration, poster abstract submission, accommodations, visas, financial support, and other details can be found on the conference website: <https://conferences.fnal.gov/nu2020/>.

### Key dates:

- \* **February 28:** early bird registration deadline
- \* **March 15:** financial assistance application deadline
- \* **April 1:** poster abstract deadline
- \* **May 20:** registration closes

Sincerely,  
Steve Brice, Marvin Marshak, Sam Zeller  
for the Neutrino 2020 Local Organizing Committee  
[email: nu2020@fnal.gov](mailto:nu2020@fnal.gov)

## Phenomenology 2020 Symposium (PHENO 2020)

Pittsburgh, PA, USA

4–6 May, 2020

Early Registration Deadline – **13 April, 2020**

Dear Colleagues,

The Phenomenology 2020 Symposium (PHENO 2020) will take place at the University of Pittsburgh during May 4-6, 2020.

The Symposium will cover current issues in particle physics phenomenology, theoretical developments, and recent experimental results, ranging from low energy phenomena over collider physics to astroparticle physics and cosmology. The Symposia are attended by both experimental and theoretical physicists, with a large number of junior participants. The broad plenary and parallel sessions provide an excellent forum for discussions.

- Early registration will end April 13, 2020; Talk submission will end April 20, 2020; Registration will close April 27, 2020.
- A number of awards are available to domestic graduate students for travel and accommodation.
- There will be a “Forum on early career development” on Monday at lunchtime.

For registration and further information, please visit the web site: <https://indico.cern.ch/event/858682/>

Note that LoopFest 2020 will take place at the University of Pittsburgh immediately following PHENO 2020.

For more information, please see <https://indico.cern.ch/event/866125/>

We look forward to seeing you at PHENO 2020!

Best regards!

Tao Han

on behalf of the PHENO 2020 organizers:

Brian Batell, Joshua Berger, Ayres Freitas, Joni George, Tao Han (chair), Adam Leibovich, Natália Maia, Cédric Weiland and Keping Xie

(Pheno Symposia are supported by the US DOE, NSF, and PITT PACC)

# LoopFest XIX

7—9 May, 2020

Abstract submission deadline: **30 April, 2020**

Pittsburgh, PA, USA

LoopFest XIX will be held on May 7-9 at the University of Pittsburgh

LoopFest provides a forum for discussing the latest results in precision quantum field theory and their applications to understanding experimental data at current and future colliders. The workshop will consist of three days of plenary talks.

Topics include:

- The potential of the LHC and future colliders for precision measurements
- Progress in multi-loop and multi-leg calculations
- Interfacing fixed-order higher-order calculations with multi-purpose event generators
- Application of effective field theory techniques to precision calculations
- Prospects for improving PDFs for precision measurements

Loopfest XIX is supported by [PITT PACC](#).

For further information, abstract submission, and registration, please visit:

<https://indico.cern.ch/e/loopfest2020>

Note that the Phenomenology 2020 Symposium (PHENO 2020: <https://indico.cern.ch/event/858682/>) will take place in Pittsburgh right before LoopFest XIX.

Best regards!

Ayres Freitas

on behalf of the local organizers: Ayres Freitas (chair), Joni George, Tao Han, Keping Xie  
and the advisory committee: Lance Dixon, Frank Petriello, Laura Reina, Doreen Wackerath

## TASI-2020

1-26 June, 2020

Application Deadline: **1 March, 2020**

TASI-2020 will be held at the University of Colorado, June 1-26 2020. This year's title is **The Obscure Universe: Neutrinos and Other Dark Matters** and the organizers are Andre De Gouvea (Northwestern U.) Heather Logan (Carleton U.)

The program will consist of a pedagogical series of lectures and seminars. Lectures will be given over a four-week period, three or four lectures per day, Monday through Friday. The audience will be composed primarily of advanced theoretical graduate students. Experimentalists with a strong background in theory are also encouraged to apply. We hope to provide some subsidy, but students will need partial support from other sources. Rooms, meals, and access to all facilities will be provided at reasonable rates in dormitories at the University of Colorado. The deadline for applications will be **March 1 2020**. The URL with more information is <https://www.colorado.edu/physics/TASI> or email [TASI@colorado.edu](mailto:TASI@colorado.edu).

**XIV International Conference on Interconnections between Particle Physics and Cosmology (PPC2020)**

**18-22 May, 2020**

**Abstract Submission Deadline: 1 March, 2020**

**Early Registration Deadline: 1 April, 2020**

**Late Registration Deadline: 4 May, 2020**

Dear Colleagues,

The XIV International Conference on Interconnections between Particle Physics and Cosmology (PPC2020) will take place during the week of May 18-22, 2020 on the campus of the University of Oklahoma in Norman, OK, USA.

The conference includes an exciting lineup of plenary speakers along with opportunities to present parallel session talks.

Please see our website: <http://www.ou.edu/ppc> for information on registration, lodging and travel.

Also, the Indico site at <https://indico.cern.ch/event/822029/> is available for submission of abstracts.

For further information, contact any of the local organizing committee:

<http://www.ou.edu/ppc/contact> .

## 2020 MCnet-CTEQ Summer School

2 - 12 August 2020

Registration Deadline: **31 March, 2020**

Bad Herrenalb, near Karlsruhe, Germany

Dear Colleagues,

We are pleased to announce the 2020 MCnet-CTEQ Summer School on QCD, Electroweak Phenomenology, and Monte Carlo Generators to be held in Bad Herrenalb, near Karlsruhe, Germany, 2-12 August 2020.

In addition to a focused introduction to perturbative QCD, Higgs boson phenomena and recent experimental results, the school will include lectures and tutorials on Monte Carlo Event Generators. The school is ideally suited for advanced graduate students and young postdocs.

For further information, including application procedures, please refer to the website:

<https://indico.scc.kit.edu/event/721/>

which is linked from both the MCnet and CTEQ webpages, or contact [school@montecarlonet.org](mailto:school@montecarlonet.org)

Review of applications will begin 1 March 2020 and will continue as space is available.

Sincerely,

The MCnet--CTEQ Summer School Organizers