

February 2019 DPF Newsletter

Dear DPF members,

Please find below the monthly DPF newsletter for February 2019. This newsletter will be archived on the DPF website.

If you would like an announcement included in the March 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

Rick Van Kooten, Member-at-Large, rvankoot@indiana.edu

Elizabeth Worcester, Member-at-Large, etw@bnl.gov

1. [Linear Collider Community Meeting at EPFL, 8-9 April 2019](#)
2. [SUSY 2019, Corpus Christi, Texas, 20-24 May 2019](#)
3. [SNEWS 2.0: Supernova Neutrinos in the Multi-Messenger Era, Laurentian University](#)

[14-17 June 2019](#)

4. [2019 CTEQ Summer School: University of Pittsburgh, USA, 16-26 July 2019](#)
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Linear Collider Community Meeting at EPFL, 8-9 April 2019

Dear Colleagues,

We are happy to announce the "**Spring 2019 Linear Collider Community Meeting at EPFL-Lausanne, Switzerland**".

The meeting has three main objectives:

- Initiate the formation of a strategy for future linear collider activities.
- Discuss how to present the case for linear colliders at the Open Symposium in Granada.
- Address the future organisation of the international linear collider activities beyond LCC.

In addition to the input provided by CLIC and ILC to the European Strategy process, the decision of Japan concerning hosting the ILC is expected to be known at the time of the meeting.

The meeting will be open. It will start Monday 8.4 at 11:00 and conclude Tuesday 9.4 at 16:00.

The meeting is arranged on the initiative of LCB/IFCA and is supported by ECFA. CERN and EPFL act as local organisers.

The venue is the SwissTech convention centre at the EPFL campus: <https://www.stcc.ch/fr/>

The WEB page for the meeting is being prepared at: <https://indico.cern.ch/event/789524/>

Please be aware that registration will be open by next week.

Documents submitted to the European Strategy update process can be found at:

<http://linearcollider.web.cern.ch/content/european-strategy-document>

Best regards,

Juan Fuster (ECFA LC physics & detector study)

Steinar Stapnes (LC/CERN)

Tatsuya Nakada (LCB and EPFL)

**XXVIIth International Conference on Supersymmetry and Unification of
Fundamental Interactions (SUSY 2019)**

May 20-24, 2019

Corpus Christi, Texas, USA

XXVIIth International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY 2019), hosted by Texas A&M University – Corpus Christi during May 20-24, 2019, will provide a unique venue to discuss and understand the status of SUSY, connection between particle physics and cosmology, supersymmetry and its alternative, Higgs sector, neutrino sector, flavor sector, dark matter, electroweak phase transition, astroparticle physics, gravitational waves and string theory. Discussion of results from the LHC, recent neutrino experiments and observations, direct and indirect dark matter detection experiments, detection of gravitational waves, data from particle colliders, as well as measurements of the CMB and Large Scale Structure will be an integral part of SUSY 2019. To ensure the younger participants will benefit from the conference the most, the conference will be preceded by the 4 day long pre-SUSY summer school for graduate students and postdocs. The school will take place on Texas A&M University – Corpus Christi campus during the week prior the SUSY 2019 conference (May 15 – 18, 2019).

SUSY2019 – SCIENTIFIC TOPICS:

- Supersymmetry: Models, Phenomenology and Experimental Results
- Unification of Forces
- Electroweak, Top and Higgs Physics
- Precision Calculations and MC tools
- BSM in Flavor Physics
- Neutrino Masses: Models and Phenomenology
- Cosmology and Gravitational Waves
- Dark Matter, Astroparticle Physics
- Formal Field Theory and Strings
- Alternatives to Supersymmetry
- Quantum Information: Machine Learning/Big Data

Contact info: Phone: [001-361-825-3916];

Email: SUSY2019@tamucc.edu

Event website: <http://www.sci.tamucc.edu/events/susy/index.html>

On behalf of the Local Organizing Committee: Barbara Szczerbinska & Bhaskar Dutta

SNEWS 2.0: Supernova Neutrinos in the Multi-Messenger Era

Save the date!

Workshop at Laurentian University, Sudbury, Canada, June 14-17, 2019

SNEWS, the SuperNova Early Warning System (snews.bnl.gov), is an inter-experiment network with the aim of providing a prompt alert to the astronomical community of the observation of the burst of neutrinos from a nearby core-collapse supernova. SNEWS began in 1998 and has been operational in automated-output mode since 2005. Since that time, there has been remarkable evolution of the transient astronomy landscape. Gravitational wave detectors are now active, and there have been recent spectacular observations involving multiple wavelengths of electromagnetic radiation, neutrinos and gravitational waves. Community infrastructure for fast response to alerts has improved significantly and there are new opportunities available for rare and valuable gathering of scientific information in response to a detected neutrino burst.

The "SNEWS 2.0" workshop will be held at Laurentian University, Sudbury, Canada, June 14-17, 2019. It will focus on plans for an update of SNEWS, given the new context of multi-messenger astronomy. The focus will be on real-time alert aspects of supernova neutrino detection.

Topics to be covered:

- Supernova neutrino detection capabilities of existing and future experiments
- Multi-messenger signals from core-collapse supernovae and other transients also observable in neutrino detectors
- Existing astronomical alert networks
- Updated alert dissemination; information to be shared, mechanisms for information sharing
- Pointing with neutrinos: methods and strategies
- Pre-supernova alert sensitivities and strategies

The workshop format will include invited talks, some talks selected from contributed abstracts, and a poster session. Early-career community members are especially encouraged to attend. Details concerning travel bursaries for graduate students will be placed on the workshop website prior to opening of registration. Underground tours of SNOLAB will be available on both June 14th and 17th, but tour spots are limited to 30 per day. Signup for tours will be part of the online registration.

Registration and abstract submission will open on March 1.

SNEWS2.0.snolab.ca

The organizing committee Alec Habig (U. of Minnesota, Duluth), Rafael Lang (Purdue University), Danny Milisavljevic (Purdue University), Kate Scholberg (Duke University), Clarence Virtue (Laurentian University)

2019 CTEQ Summer School: University of Pittsburgh, USA, 16-26 July 2019

Dear Colleagues,

This is the first announcement of the 2019 CTEQ Summer School on QCD and Electroweak Phenomenology, to be held at the University of Pittsburgh in Pittsburgh PA, USA on **16-26 July 2019**.

In addition to a focused introduction to perturbative QCD and recent experimental results, this year's school will include [lectures and tutorials on Machine Learning and Monte Carlo methods and applications](#). The school is ideally suited for advanced graduate students and young postdocs.

For further information, including application procedures, please refer to the Summer School website: <http://cteq.org/schools/summer19> which is linked from the CTEQ webpage at www.cteq.org or contact cteq.school@gmail.com

Review of applications will begin on 1 March 2018.

Sincerely,

The CTEQ Summer School Organizers

BOOST 2019, 22-26 July 2019

11th International Workshop on Boosted Object Phenomenology, Reconstruction and Searches in HEP

BOOST 2019 is the eleventh conference of a series of successful joint theory/experiment workshops that bring together the world's leading experts from theory and LHC experiments to discuss the latest progress and develop new approaches on the reconstruction of and use of boosted decay topologies in order to search for new physics. This year is hosted at the MIT Stata Center from 22-26 July 2019.

More information about this workshop is available at <https://indico.cern.ch/e/boost2019>

We look forward to welcoming you to BOOST in Boston!

Zeynep Demiragli, Philip Harris, Yen-Jie Lee, Matthew Schwartz, Jesse Thaler

DPF Mentoring Award

The Division of Particles and Fields of the American Physical Society has established a new award to honor exceptional mentoring. The award will be bestowed yearly for mentoring, broadly construed.

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 nomination process for the **2019 DPF Mentoring Award** is now open, and the deadline has been extended to March 15, 2019. Follow the nomination instructions found at <https://academicjobsonline.org/ajo/award/10733>.

For more information: <https://www.aps.org/units/dpf/awards/mentoring.cfm>

The DPF is pleased to announce that **the 2018 DPF Mentoring Award has been awarded to Bonnie Fleming, Yale University.**

“For her dedication to mentoring the next generation of experimentalists, providing opportunities and support for each to excel in their own way, tirelessly supporting diversity, developing new outreach initiatives, and showing by example how to be a physicist, colleague, and collaborator.”

James Alexander, Cornell (Chair), Mirjam Cvetič, U. Pennsylvania (Vice Chair), Karsten Heeger, Yale U., Robin Erbacher, U.C. Davis, Roni Harnik, Fermilab

DPF Membership

If you are reading this, you are likely a DPF member already, and you already know that the DPF drives the U.S. particle physics community planning process, connects to other divisions and to a broader international community, and provides networking and resources for its members (for example, student travel support to meetings). The more DPF members we can engage, the more APS resources we have access to, and the stronger our community will be. International members are very welcome.

Please forward the information below to your students and colleagues. Information on how to check unit membership is included.

APS Unit Membership Information

Here are general benefits of APS membership:

<http://www.aps.org/membership/benefits.cfm>

If you are not an APS member, you can join here:

<https://www.aps.org/memb-sec/join/startpage.cfm>

Students can join at a reduced rate, and for free for their first year:

<http://www.aps.org/membership/student.cfm>

If you are already an APS member, and you are not sure if you are also a DPF member, you can check whether you are by doing the following:

Go to the member page:

<https://www.aps.org/membership/index.cfm>

Sign in at “My member profile,” and click on the “membership” tab. To add a unit, click on the “Add Unit” button.