October 2020 DPF Newsletter

Dear DPF members,

Please find below the monthly DPF newsletter for October 2020. This newsletter will be archived on the DPF website. If you would like an announcement included in the November newsletter, to be sent out around November 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

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DPF Recipients of 2021 APS Awards

APS just announced 2021 Prize/award recipients https://www.aps.org/programs/honors/new-recipients.cfm

Included in the announcement were the following DPF awards:

J.J. Sakurai Prize for Theoretical Particle Physics

Vernon Barger (2021 Recipient)

University of Wisconsin-Madison

For pioneering work in collider physics contributing to the discovery and characterization of the W boson, top quark, and Higgs boson, and for the development of incisive strategies to test theoretical ideas with experiments.

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

Edward Kearns (2021 Recipient)

Boston University

Henry W. Sobel (2021 Recipient)

University of California, Irvine

For pioneering and leadership contributions to large underground experiments for the discovery of neutrino oscillations and sensitive searches for baryon number violation.

Henry Primakoff Award for Early-Career Particle Physics

Jaroslav Trnka (2021 Recipient)

University of California, Davis

For seminal work on the computation of particle scattering amplitudes, including the development of a new mathematical approach, the amplituhedron.

And jointly with DPB:

Robert R. Wilson Prize for Achievement in the Physics of Particle Accelerators

Yuri Fyodorovich Orlov (2021 Recipient)

Cornell University

For pioneering innovation in accelerator theory and practice, including the independent development of the synchrotron radiation partition sum rule; seminal contributions to the muon g-2 experiment; deep understanding of beam and spin dynamics; consistently unique and fruitful ideas, ranging from the practical to the visionary; and embodying the spirit of scientific freedom.

Congratulations to all the recipients!

Snowmass News

Dear colleagues,

Over the next year, the U.S. particle physics community will be engaged in Snowmass 2021, an in-depth process to define the most important questions for our field and to identify the most promising opportunities to address these questions in a global context.

The latest Snowmass newsletter is available at https://snowmass21.org/announcements.

Snowmass Community Planning Meeting

The CPM 2020 took place virtually between October 4 and October 8 with about 3,000 participants (attendance information can be found https://indico.fnal.gov/event/44870/. The primary goal of the CPM was to develop plans or steps ("Snowmass Planning") to achieve a successful Snowmass 2021 report. More information is available in the October Snowmass Newsletter.

Thank you for submitting Letters of Interest (LoIs), 2-page informal documents including opinions, interests and proposals that could further be studied. These LoIs will help Snowmass conveners to prepare breakout sessions of the CPM meeting. We look forward to receiving more LoIs. Instructions for submitting them are available at https://snowmass21.org/loi

Best regards, Young-Kee Kim, DPF Chair On behalf of the Snowmass Organization Team

Forward Physics Facility Kickoff Meeting

November 9-10, 2020 Submission Deadline: **25 October, 2020**

Dear Colleagues,

A rich physics program remains unexplored in the far-forward region at the LHC. The Forward Physics Facility (FPF) is a proposal to enlarge an existing cavern in the far-forward region, 500 m from ATLAS, to house a suite of experiments with groundbreaking new capabilities for neutrinos, long-lived particle searches, milli-charged particle searches, QCD, dark matter, dark sectors, and cosmic rays. The FPF will be shielded from the ATLAS interaction point by 100 m of concrete and rock, creating an extremely low-background environment, ideal for many standard model studies and new physics searches.

We are organizing a first workshop to bring together scientists from various areas to discuss the Forward Physics Facility's feasibility and physics potential. The goal of this meeting is to generate new ideas and organize and motivate work that will serve as the basis for the FPF Snowmass white paper and eventually a proposal for the Facility.

The meeting will take place online November 9-10, and we are currently planning on 2 half days of relatively short talks, followed by ample time for discussion. An outline of the meeting agenda is at https://indico.cern.ch/event/955956.

You are cordially invited to participate in the meeting. Registration is free, but please register at the indico site so we can send you the zoom link, and, if interested, submit a talk title and abstract by October 25, so we can include it in the program.

Best wishes,

Jonathan Feng, Maria Garzelli, Felix Kling Organizers

Expressions of Interest for Potential Cooperation on the Electron Ion Collider Experimental Program

Deadline: 1 November, 2020

Dear prospective Electron-Ion Collider users,

Brookhaven National Laboratory (BNL), in association with Thomas Jefferson National Accelerator Facility (TJNAF), would like to invite interested groups to submit an Expression of Interest (EOI) for their potential cooperation on the experimental equipment in support of a broad and successful science program at the Electron-Ion Collider (EIC).

We encourage interested groups to work together within their country, their geographical region, or as a general consortium, to submit such EOIs.

This call focuses on all detector components to facilitate the diverse EIC science program, including those integrated in the interaction region.

Please visit https://www.bnl.gov/eic/EOI.php to see further details about this call and how to submit an Expression of Interest.

Best regards, Elke Aschenauer and Rolf Ent for the EIC Project Team