



FSPA

Fermilab Student &
Postdoc Association

FSPA Report

Mike Wallbank, for the FSPA Officers

UEC Meeting

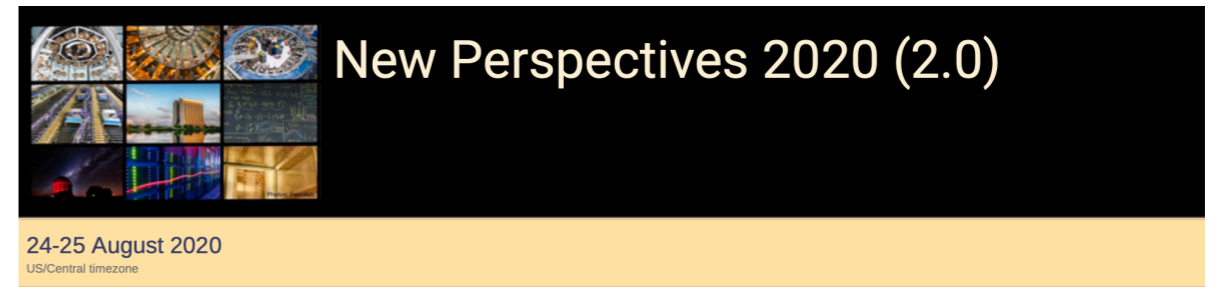
8/14/2020

Things We've Been Up To

- Users' Meeting!
 - We've been happy to help out as much as we can with the UM.
 - Even though things are normally planned a lot more in parallel with NP and we are more involved in the UM organization, given the current situation I think we made it work!
 - Special thanks to Richie and Luke for all of their efforts!
- New Perspectives 2.0.
- Planning our final couple of careers events.
- Preparing for our upcoming election.

New Perspectives 2.0!

- Indico set up, timetable is now live!
<https://indico.fnal.gov/event/44451/>
- 31 speakers currently confirmed!
 - We have room for a few more too, so we may get a few more.
- 206 registrants currently.
- Looking forward to another great meeting!
- Thanks to Luke and Maria for the amazing work planning everything.



- Overview
- Call for Abstracts
- Timetable
- Registration
- Fermilab Statement of Community Standards

New Perspectives is a conference for, and by, young researchers in the Fermilab community. It provides a forum for graduate students, postdocs, visiting researchers, and all other young persons that contribute to the scientific program at Fermilab to present their work to an audience of peers.

New Perspectives has a rich history of providing the Fermilab community with a venue for young researchers to present their work. Oftentimes, the content of these talks wouldn't appear at typical HEP conferences, because of its work-in-progress status or because its part of work that will not be published. However, it is exactly this type of work, frequently performed by the youngest members of our community, that forms the backbone of the research program at Fermilab. The New Perspectives Organizing Committee is deeply committed to presenting to the community a program that accurately reflects the breadth and depth of research being done by young researchers at Fermilab.

New Perspectives is organized by the [Fermilab Student and Postdoc Association](#) and serves as a preamble to the Fermilab Users Annual Meeting.

Starts Aug 24, 2020, 12:45 AM
Ends Aug 25, 2020, 6:50 PM
US/Central

Conference Opening	08:45 - 09:00
09:00 A multidisciplinary endeavor in experimentation in DAMIC	Michelangelo Traina 09:00 - 09:15
SuperCDMS IMPACT: Measuring the sub-keV ionization Yield in Cryogenic Solid-State Detectors	Tyler Reynolds 09:15 - 09:30
Search for fractionally-charged particles with CDMSlite	Mr. Samir Banik 09:30 - 09:45
Search for millicharged particles at the LHC with the milliQan prototype	Luca Lavezzo 09:45 - 10:00
10:00 Monday Morning Break	10:00 - 10:30
Energy reconstruction technique for very high energy muons with DUNE far detector.	Jaydip Singh 10:30 - 10:45
Impact of Cross-Sectional Uncertainties on DUNE Sensitivity due to Nuclear Effects	SRIISHI NAGU 10:45 - 11:00
11:00 Simple Charge and Flash Matching to better constrain cosmic background in SBN's near and far detectors.	Iker de la Icaza Astiz 11:00 - 11:15
Event Reconstruction Improvements with Machine Learning in SBND	Edward Tiley 11:15 - 11:30
Results from the ICARUS T600 Detector concerning the "Online Method" of Purity Monitoring	Olivia Bitter 11:30 - 11:45
12:00 Monday Midday Break	11:45 - 12:45
Parameterization and applications of the low momentum transfer nucleon vector form factors	Kaushik Borah 12:45 - 13:00
13:00 Radiative corrections to neutrino-nucleon scattering in effective field theory	Oleksandr Tomalak 13:00 - 13:15
Efficient Neutrino Oscillation Parameter Inference with Gaussian Process	Yiyen Xiao 13:15 - 13:30
Leptonic Unitarity: Current and Future	Kevin Kelly 13:30 - 13:45
14:00 Monday Afternoon Break	13:45 - 14:15
Comparing Acoustic Signals in the Buildup to a Magnet Quench with the Minimum Quench Energy	Sujay Kazi 14:15 - 14:30
NuMI Beam Monitoring Simulation and Data Analysis	Yiding Yu 14:30 - 14:45
Mu2e Event Reconstruction	Mackenzie Devilbiss 14:45 - 15:00
15:00 The muon σ_{S-2} and σ_{Δ} connection	Dr Alexander Keshavarzi 15:00 - 15:15

09:00 Creating Unique Parton Shower Histories with Se...	Christian Tobias Preuss
Fully-hadronic search for standard model production of ...	Melissa Quinlan
The CMS Outer Tracker Upgrade for the HL-LHC	Maxwell Herrmann
Glue Digitization for Quantum Computers	Dr Henry Lamm
Monte Carlo Integration on GPUs - The gVEGAS Algorithm	Smita Darmora
10:00 Tuesday Morning Break 1	
GenFit2 for SpinQuest Tracking	Abinash Pun
SpinQuest/E1039 FPGA Trigger	Minjung Kim
11:00 Systematic Study of Spectrometer-Induced Azimuthal...	Md Forhad Hossain
Dilution factor calculation and its contribution to SpinQuest ...	Anchit Arora
The Polarized-Target System for the SpinQuest Experime...	Zulkaida Akbar
12:00 Tuesday Morning Break 2	
Career Seminar	
13:00 Tuesday Afternoon Break	12:15 - 13:15
14:00 Constraining the Neutral Current π^0 Background for Micr...	Andrew Mogan 13:15 - 14:15
A Convolutional Neural Network for Shower Energy Reconstr...	Nick Kamp
Systematic Studies for a Photon-like Low Energy Excess...	Gray Yarbrough
15:00 A Charged-Current Muon-Neutrino Veto for the Inclusive Elec...	Erin Yandel
Constraining "Dirt" Backgrounds for the MicroBooNE Single P...	Keng Lin
Conference Closeout	

Careers Events

- Two final events planned, hoping to have them both concurrent with NP 2.0 as a great addition to the program.
- Eileen Beno: LinkedIn and the HR Perspective on Hiring
- Industry-focussed career panel:
 - Ben Kreis (Apple, formerly CMS) (thanks to Oli for putting us in touch!)
 - Cristiana Principato (MakerSights, formerly NOvA etc)
 - Rizki Syarif (TrueMotion, formerly CMS) (Ben's suggestion)
 - Cristiana confirmed, Ben agreed in principle. Waiting for final confirmations.

FSPA For Change

- Following FSPA Action Month, we had a discussion with members of the community to decide where to go from here.
- Still in the process of figuring out our plans, but things we will consider include:
 - Getting involved in Snowmass, particularly Snowmass-Young;
 - Giving talks to FNAL collaborations, collaborating with their ‘young’ groups;
 - Find other ways (maybe collaborate with other FNAL groups) to share our collection of resources and keep adding to it;
 - Discuss at community-wide Town Hall.

Community Town Hall

- We're planning a Community Town Hall in September, to try to bring as many of our members together as possible to discuss what we've done in the past year and align ourselves with where we want to go next year.
- Opportunity to discuss ongoing efforts by FSPA, and to get input (good and bad) from everyone!
- Planned for before the election.

Election

- We're coming to the end of our terms!
- One person will stay on (not me!) for another year, in the process of defining that.
- Timeline:
 - End of August: decide who will continue, finish off all outstanding items;
 - First week in September: open up nomination period, nominally for two weeks;
 - Third week in September: begin election;
 - Last week in September: close election, announce winners;
 - (Typical first Friday in October): Meet & Greet for community to meet new members, official hand-over etc.