

**2018 US LHC Users
Association Meeting**

Report of Contributions

Contribution ID: **58**

Type: **not specified**

Welcome to Fermilab

Thursday, October 25, 2018 9:00 AM (10 minutes)

Presenter: LOCKYER, Nigel (Fermilab)

Contribution ID: 59

Type: **not specified**

Codes of conduct and Fermilab access

Thursday, October 25, 2018 9:10 AM (20 minutes)

Presenter: BURKETT, Kevin (Fermilab)

Contribution ID: **60**

Type: **not specified**

US-LUA Chair's report

Thursday, October 25, 2018 9:30 AM (25 minutes)

Including committee reports

Presenters: NEWMAN, Harvey (Caltech); Prof. STONE, Sheldon (Syracuse University)

Contribution ID: **61**

Type: **not specified**

Status and outlook for the LHC

Thursday, October 25, 2018 10:00 AM (25 minutes)

Presenter: STEERENBERG, Rende (CERN)

Contribution ID: **62**

Type: **not specified**

US LHC accelerator program

Thursday, October 25, 2018 12:00 PM (25 minutes)

Presenters: SABBI, GianLuca (LBNL); AMBROSIO, Giorgio (FNAL TD/MSD)

Contribution ID: **63**

Type: **not specified**

ATLAS Status and Outlook

Friday, October 26, 2018 4:15 PM (25 minutes)

Presenter: DEMERS, Sarah (Yale)

Contribution ID: **64**

Type: **not specified**

CMS Status and Outlook

Thursday, October 25, 2018 11:30 AM (25 minutes)

Presenter: NARAIN, Meenakshi (Brown University)

Contribution ID: 65

Type: **not specified**

LHCb Status and Outlook

Thursday, October 25, 2018 11:00 AM (25 minutes)

Presenter: Dr ARTUSO, marina (syracuse university)

Contribution ID: **66**

Type: **not specified**

ALICE Status and Outlook

Thursday, October 25, 2018 2:00 PM (25 minutes)

Presenter: Prof. PRUNEAU, Claude (Wayne State University)

Contribution ID: 67

Type: **not specified**

Energy Frontier Colliders and the Snowmass Process

Thursday, October 25, 2018 1:30 PM (25 minutes)

Presenter: Prof. KIM, Young-Kee (FNAL)

Contribution ID: **68**

Type: **not specified**

HEP visit to DC (Gov't Relations report)

Friday, October 26, 2018 9:00 AM (25 minutes)

Presenters: Dr CHENG, Yangyang (Cornell University); CHENG, Yangyang (Cornell University)

Contribution ID: **69**

Type: **not specified**

Supporting young physicists (Quality of Life committee; ACCU)

Friday, October 26, 2018 11:00 AM (25 minutes)

Presenter: CAVALIERE, Viviana (Brookhaven National Lab)

Contribution ID: 70

Type: **not specified**

DOE office of HEP perspective

Friday, October 26, 2018 11:30 AM (20 minutes)

Presenter: Dr LECOMPTE, Thomas (US Department of Energy)

Contribution ID: 71

Type: **not specified**

DOE office of NP perspective

Friday, October 26, 2018 11:50 AM (20 minutes)

Presenter: Dr FAL, George (DOE)

Contribution ID: 72

Type: **not specified**

NSF Office of EPP perspective

Friday, October 26, 2018 12:10 PM (20 minutes)

Presenters: Prof. RUCHTI, Randal Ruchti (National Science Foundation); Prof. RUCHTI, Randy (University of Notre Dame and National Science Foundation)

Contribution ID: 73

Type: **not specified**

Space for additional talks

Contribution ID: 74

Type: **not specified**

Announcement of lightning round winners

Friday, October 26, 2018 6:00 PM (15 minutes)

Contribution ID: 75

Type: **not specified**

Phase-1 Upgrade for the CMS Hadron Endcap Calorimeter

Friday, October 26, 2018 1:30 PM (10 minutes)

The CMS hadronic calorimeter (HCAL) employs a plastic-scintillator-based endcap detector. The CMS HCAL Phase 1 upgrade involves installing silicon photomultipliers (SiPM) to measure light from scintillators in the detector. The SiPM signals are digitized by custom readout cards, called QIE cards, using the charge integration and encoder version 11 (QIE11) chip. The QIE cards for the HCAL endcap (HE) were tested and calibrated at FNAL. Then at CERN the QIE cards completed high radiation tests in the CHARM facility and muon/pion energy measurements in testbeam. Finally, the HE readout electronics were installed in CMS in 2018. The HCAL endcaps were calibrated using two Co-60 radiation sources. During physics data-taking in 2018, the HCAL online software (HCOS) configures and monitors the readout electronics to ensure data quality. This talk will summarize the testing, installation and commissioning of the HE Phase 1 upgrade readout system.

Primary author: SMITH, Caleb (Baylor University)

Presenter: SMITH, Caleb (Baylor University)

Session Classification: Young Physicists' Lightning Round Session 3

Contribution ID: 76

Type: **not specified**

Jet fragmentation and charged particle angular distribution within and around jets in Pb+Pb collisions with ATLAS

Thursday, October 25, 2018 4:35 PM (10 minutes)

The latest measurements of the jet fragmentation and the angular distributions of charged particles within and around jets, as performed with the ATLAS detector in Pb+Pb collisions at the LHC. Jets are direct probes of the QCD medium created in these collisions, and studying jet fragmentation provides insight into the strength and mechanism of jet quenching. Fragmentation functions in Pb+Pb collisions and distributions of the transverse momentum of charged particles are compared to the same quantities measured in pp collisions at the same collision energy. Measurements are presented as a function of jet transverse momentum and jet rapidity at $\sqrt{s_{NN}} = 5.02$ TeV. The charged-particle angular distributions are also measured at distances extending outside the jet radius of $R=0.4$.

Primary author: PURI, Akshat (University of Illinois, Urbana-Champaign)

Presenter: PURI, Akshat (University of Illinois, Urbana-Champaign)

Session Classification: Young Physicists' Lightning Round Session 1

Contribution ID: 77

Type: **not specified**

Measurement of Higgs bosons decaying to Tau lepton pairs and Constraints on Anomalous HVV couplings

Thursday, October 25, 2018 4:45 PM (10 minutes)

In 2017 CMS was the first experiment to observe the Higgs boson in its decay to Tau Leptons. Now, using 35.9 1/fb of data collected by CMS from proton-proton collisions at the Large Hadron Collider in 2016, this channel is used to search for anomalous couplings in the production of the Higgs. The search is performed using the Matrix Element Likelihood Analysis (MELA) method to constrain four different types of anomalous couplings. The final limit makes use of an advanced 2 dimensional fit technique and results, so far, remain consistent with the Standard Model. The analysis is described and plans for the future, which include implementation of a machine learning algorithm for improved event selection, are presented.

Primary author: HIGGINBOTHAM, Samuel Lloyd (Princeton University)

Presenter: HIGGINBOTHAM, Samuel Lloyd (Princeton University)

Session Classification: Young Physicists' Lightning Round Session 1

Contribution ID: 78

Type: **not specified**

Why do we care about looking for di-Higgs production?

Thursday, October 25, 2018 4:55 PM (10 minutes)

In 2012, the LHC experiments discovered a Higgs boson-like particle, however there are still outstanding questions about the Higgs sector. Is this the Standard Model (SM) Higgs? Are there any additional Higgs bosons? Does physics Beyond the SM exist? In this talk I will explain how studying di-Higgs production can provide a unique window into these questions, as well as insight into electroweak symmetry breaking. I will also discuss the current status and future prospects of searching for di-Higgs production at ATLAS.

Primary author: BURCH, Tyler James (Northern Illinois University)

Presenter: BURCH, Tyler James (Northern Illinois University)

Session Classification: Young Physicists' Lightning Round Session 1

Contribution ID: 79

Type: **not specified**

Search for W Gamma Resonances in proton - proton collisions in 13TeV

Friday, October 26, 2018 5:05 PM (10 minutes)

We present a model-independent search for beyond-standard-model heavy resonances decaying into a W boson and a photon. Possible models include charged Higgs, W', and supersymmetric mesons in folded-SUSY. The lepton channel is used as it has lower background and higher sensitivity to still uninvestigated resonance mass ranges. We aim to set cross-section limits through detailed data analysis of CMS 2016-17 run 2 data.

Primary author: WONG, Kak (University of Maryland)

Presenter: WONG, Kak (University of Maryland)

Session Classification: Young Physicists' Lightning Round Session 4

Contribution ID: 80

Type: **not specified**

Natural SUSY on Trial: Status of Higgsino Searches with the ATLAS Detector

Thursday, October 25, 2018 5:15 PM (10 minutes)

Natural supersymmetry has earned a unique focus in LHC search efforts, in part due to its solution to the hierarchy problem. Minimizing fine tuning in this solution leads to light Higgs superpartners, known as higgsinos, with many predictions of their masses well within LHC reach. In order to also provide a valid dark matter candidate, the lightest three higgsinos are expected to have small mass splittings between them. While this “compressed” mass spectrum is well-motivated, such scenarios produce very little missing energy and thus are experimentally challenging. Here, these challenges and the idea of naturalness are used as a lens to interpret the first higgsino sensitivity with ATLAS and discuss future search prospects.

Primary author: Ms GONSKI, Julia (Harvard University)

Presenter: Ms GONSKI, Julia (Harvard University)

Session Classification: Young Physicists' Lightning Round Session 1

Contribution ID: **81**Type: **not specified**

ATLAS ttH measurements in the H- \rightarrow gamma gamma channel

Friday, October 26, 2018 9:40 AM (10 minutes)

Higgs production in association with top quarks (ttH) is predicted by the Standard Model at a rate of about 1% of the total Higgs cross section. This process directly probes the Higgs-top coupling, a critical parameter for isolating Beyond the Standard Model contributions to Higgs physics. The ATLAS search for ttH events in conjunction with the decay $H \rightarrow \gamma\gamma$ takes advantage of the high photon detection efficiency and energy resolution of the ATLAS electro-magnetic calorimeter, as well as the relatively low rate of diphoton background processes. The application of sophisticated multivariate techniques to identify $ttH \rightarrow \gamma\gamma$ events improves the sensitivity to ttH compared to past analyses. In combination with other Higgs decay channels, $ttH \rightarrow \gamma\gamma$ contributed to the recent discovery of the ttH production mode.

Primary author: DICKINSON, Jennet (UC Berkeley/LBL)

Presenter: DICKINSON, Jennet (UC Berkeley/LBL)

Session Classification: Young Physicists' Lightning Round Session 4

Contribution ID: **82**Type: **not specified**

Dark Photons at LHCb

Friday, October 26, 2018 9:50 AM (10 minutes)

The possibility that dark matter particles may interact via unknown forces, felt only feebly by Standard Model particles, has motivated substantial effort to search for dark-sector forces, the dark photon being a promising candidate. Its motivation, LHCb search results, and current limits will be presented.

Primary authors: Mr WEISSER, Constantin (Massachusetts Institute of Technology); WEISSER, Constantin (MIT)

Presenters: Mr WEISSER, Constantin (Massachusetts Institute of Technology); WEISSER, Constantin (MIT)

Session Classification: Young Physicists' Lightning Round Session 4

Contribution ID: 83

Type: **not specified**

Measurement of the Shape of the $\Lambda_b \rightarrow \Lambda_c \mu \nu$ Differential Decay Rate

Thursday, October 25, 2018 4:15 PM (10 minutes)

A measurement of the shape of the differential decay rate and associated Isgur-Wise function for the decay $\Lambda_b \rightarrow \Lambda_c + \mu + \nu$ has been performed using data corresponding to 3fb^{-1} collected with the LHCb detector using proton-proton collisions. The $\Lambda_c \mu \nu$ final states are reconstructed by the detection of a muon and a Λ_c baryon decaying to $pK^-\pi^+$, and the decay $\Lambda_b \rightarrow \Lambda_c \pi^+\pi^-\mu + \nu$ is used to determine contributions from $\Lambda_b \rightarrow \Lambda_c \mu + \nu$ decays. The measured dependence of the differential decay rate upon the squared four-momentum transfer between the heavy baryons, q^2 , is compared with expectations from heavy-quark effective theory and from unquenched lattice QCD predictions.

Presenter: ELY, Scott Edward (Syracuse University)

Session Classification: Young Physicists' Lightning Round Session 1

Contribution ID: **84**Type: **not specified**

A data driven search for non-resonant features in the dilepton spectra at ATLAS

Friday, October 26, 2018 10:00 AM (10 minutes)

The ATLAS experiment is conducting a search for high mass resonant and non-resonant features in dilepton (ee , $mumu$) spectra using the full Run-2 dataset. Models with new contact interactions (CI) and large extra dimensions (ADD) can manifest themselves as a slight enhancement in the high mass tail of the spectrum. The challenge is to develop a background model that can constrain the shape of the tail, and still provide sensitivity to new features. We present a data driven strategy designed to search for such features. The method has been optimized for sensitivity to CI, but it is sensitive to a wide variety of models and features.

Presenter: WHITE, Aaron (University of Michigan)

Session Classification: Young Physicists' Lightning Round Session 4

Contribution ID: 85

Type: **not specified**

Probing new physics through exotic Higgs boson decays to a pair of light bosons

Friday, October 26, 2018 10:10 AM (10 minutes)

Exotic decays of the Standard Model (SM) Higgs boson provide a unique window for the discovery of new physics, as the Higgs may couple to hidden-sector states that do not interact under the SM gauge transformations. Models predicting exotic Higgs decays to additional light bosons appear in many extensions to the SM and can explain several unknowns in physics, such as the nature of dark matter and the existence of supersymmetry. These type of searches also provide many exciting experimental aspects, including soft (low energy) leptons and jets, final states with triggering challenges, and jet merging at low energy scales. This talk will focus on the $h \rightarrow a\bar{a} \rightarrow 2b2\mu$ search to illustrate some solutions to these challenges and present an outlook for future ATLAS searches in this extended light boson sector.

Presenter: HAYES, Christopher (Stony Brook University)

Session Classification: Young Physicists' Lightning Round Session 4

Contribution ID: 86

Type: **not specified**

Neutron Irradiation of Silicon Sensors for the Phase 2 Upgrade

Friday, October 26, 2018 1:40 PM (10 minutes)

Silicon sensors find application in the phase 2 upgrade of the inner and outer tracker and the endcap calorimeter for CMS. In these locations they will be exposed to a high fluence of charged particles and neutrons. We are using the research reactor at the Rhode Island Nuclear Science Center to expose prototype sensors to neutrons to understand their effect on the performance of the sensors. The talk will discuss the measurement of the neutron flux spectrum of the reactor and the different techniques available for irradiating prototype sensors.

Presenter: BURKLE, Bjorn (Brown University)

Session Classification: Young Physicists' Lightning Round Session 3

Contribution ID: 87

Type: **not specified**

Visualizing Electrons in ATLAS

Friday, October 26, 2018 1:50 PM (10 minutes)

Efficient and accurate electron reconstruction, identification, and calibration are critical for signal selection and uncertainty reduction in a broad range of ATLAS analyses. Traditionally, electron algorithms are built using physics-motivated, derived variables. This talk explores an alternate method for representing electrons by building images using calorimeter cells.

Presenter: THAIS, Savannah (Yale University)

Session Classification: Young Physicists' Lightning Round Session 3

Contribution ID: 88

Type: **not specified**

Measurement of the cross section of top quark pairs in association with a photon in lepton+jets events at $\sqrt{s} = 13$ TeV

Friday, October 26, 2018 2:00 PM (10 minutes)

The production cross section of a top quark pair plus a radiated photon is measured during proton-proton collisions at the centre of mass energy of 13 TeV corresponding to an integrated luminosity of 35.86 inverse fb at the LHC, at CERN. The data was recorded by the Compact Muon Solenoid experiment. The signal region is defined by top quark pairs, an isolated lepton, photon, jets from the hadronization of quarks, and missing transverse energy. The photons may be emitted directly from initial state radiation, top quarks as well as from its decay products. An important part of the analysis is calculation of photon purity and photon identification efficiency, which are done using data-driven methods and MC simulation.

Presenter: Ms ROY, Titas (Florida Institute of Technology)

Session Classification: Young Physicists' Lightning Round Session 3

Contribution ID: 89

Type: **not specified**

Search for resonant $t\bar{t}$ production in proton-proton collisions at 13 TeV

Friday, October 26, 2018 5:15 PM (10 minutes)

A search for a heavy resonance decaying into a top quark and antiquark pair is performed using proton-proton collisions at 13 TeV. The search uses the dataset collected with the CMS detector in 2016, which corresponds to an integrated luminosity of 35.9 1/fb. The analysis is split into three exclusive final states and uses reconstruction techniques that are optimized for top quarks with high Lorentz boosts, which requires the use of non-isolated leptons and jet substructure techniques. No significant excess of events relative to the expected yield from standard model processes is observed. Upper limits on the production cross section of heavy resonances decaying to a $t\bar{t}$ pair are calculated. Limits are derived for a leptophobic topcolor Z' and for Kaluza–Klein excitations of the gluon in the Randall–Sundrum model.

Presenter: Ms ROOZBAHANI, Bahareh (suny Buffalo)

Session Classification: Young Physicists' Lightning Round Session 4

Contribution ID: 90

Type: **not specified**

Illuminating the Hbb Discovery at ATLAS with the VBF + photon channel

Friday, October 26, 2018 2:10 PM (10 minutes)

After the discovery of the Higgs Boson in 2012 a major goal for Higgs physics is the more precise measurement of its couplings, especially that of its dominant but largely unconstrained decay to $b\bar{b}$. Beyond the importance of this measurement to our understanding of the SM, these constraints also serve as a probe of new physics beyond the SM. This year the ATLAS collaboration leveraged the combined Run 1 and Run 2 datasets and the power of multiple analyses to produce a 5.4 sigma (observed) discovery of Hbb. In this talk I will discuss the VBF analysis which found a 1.9 sigma (observed) signal strength for Hbb using a 30.6/fb dataset at 13 TeV. This analysis took advantage of the inclusion of a final state photon to reject QCD background process as well as innovations in bottom quark p_T reconstruction to improve the final fit result.

Presenter: Mr PASNER, Jacob (University of California Santa Cruz)

Session Classification: Young Physicists' Lightning Round Session 3

Contribution ID: 91

Type: **not specified**

Search for Vector boson scattering of WZ boson pairs

Thursday, October 25, 2018 5:05 PM (10 minutes)

Production of massive vector bosons via vector boson scattering provides a direct probe of the self-interactions of the massive vector bosons, which are intimately connected to the Higgs-Englert-Brout mechanism of EW symmetry breaking. A search for vector boson scattering of W and Z bosons has recently been performed by the CMS experiment using data collected in 2016. I will present this search as well as cross section measurements of WZ+2 jet events, which are less dependent on theoretical inputs.

Presenter: LONG, Kenneth David (Univ. of Wisconsin)

Session Classification: Young Physicists' Lightning Round Session 1

Contribution ID: 92

Type: **not specified**

The CMS Outer Tracker Upgrade for the High Luminosity LHC

Friday, October 26, 2018 5:25 PM (10 minutes)

The LHC will be upgraded to the High Luminosity (HL-LHC) in the late 2020 to further increase the discovery potential of the machine. During the HL-LHC the instantaneous luminosity will be as high as $7 \times 10^{34} \text{ cm}^{-2} \text{ s}^{-1}$ in order to collect 10x more proton-proton collision data than at the LHC. The HL-LHC upgrade will set unprecedented challenges from the point of view of both detector and electronics capabilities and radiation hardness. In order to maintain its physics reach, the CMS detector will be significantly upgraded. The design choices of the new CMS Outer Tracker will be presented along with the ongoing R&D activities.

Presenter: RAVERA, Fabio (Fermilab)

Session Classification: Young Physicists' Lightning Round Session 4

Contribution ID: 93

Type: **not specified**

The LHCb Upstream Tracker upgrade and its off-detector electronics

Friday, October 26, 2018 4:45 PM (10 minutes)

The LHCb detector will operate with 40 MHz readout and full-software trigger at higher luminosity, after Phase-1 upgrade. The Upstream Tracker (UT) is a critical part of the upgrade that will increase the data rate and trigger efficiency. In this talk, I will describe the purpose and design of UT, with an emphasis on its off-detector electronics.

Presenter: Mr YANG, Zishuo (University of Maryland)

Session Classification: Young Physicists' Lightning Round Session 4

Contribution ID: 94

Type: **not specified**

RNN Tau Identification within the ATLAS HLT

Friday, October 26, 2018 4:55 PM (10 minutes)

Inspired by developments from the Tau Combined Performance group, the Tau Trigger group recently introduced a Recurrent Neural Network architecture to identify HLT tau leptons in place of our previous Boosted Decision Tree architecture. In this talk, I'll summarize the implementation and performance of this new RNN tau identification scheme within the HLT.

Presenter: PETTEE, Mariel (Yale University)

Session Classification: Young Physicists' Lightning Round Session 4

Contribution ID: 95

Type: **not specified**

ttH measurement in multi-lepton final state with ATLAS detector

Friday, October 26, 2018 2:20 PM (10 minutes)

This talk will focus on the ttH multi-lepton (non hadronic tau) channel. Since these channel is dominated by fake lepton background, data driven method is used in this channel to estimate those event, and with separately estimate norm factor for fakes from difference source, we have a relatively good modeling in the signal region and control region.

Presenter: ZHENG, Zhi (University of Michigan)

Session Classification: Young Physicists' Lightning Round Session 3

Contribution ID: 96

Type: **not specified**

Jet-associated deuteron production in pp collisions at 13 TeV with ALICE at the LHC

Friday, October 26, 2018 10:20 AM (10 minutes)

The production of deuterons in high-energy collisions is particularly sensitive to the space and time evolution of the system, as well as the baryon production and transport mechanisms. Recent ALICE measurements of spectra and anisotropic flow of (anti-)deuterons provide insight into the production mechanisms of particles in heavy-ion collisions thanks to a critical comparison with the available theoretical approaches: coalescence and hydrodynamic models. We present new preliminary results on deuteron-jet correlations from pp collisions at 13 TeV to complement these findings. The measured jet-associated yields of (anti-)deuterons will be also compared to theoretical predictions in the context of a baryon coalescence model.

Presenter: SCHAEFER, Brennan (Oak Ridge National Lab)

Session Classification: Young Physicists' Lightning Round Session 4

Contribution ID: 97

Type: **not specified**

Current and future searches for direct stau slepton production in the all-hadronic final state at CMS

Friday, October 26, 2018 9:30 AM (10 minutes)

Two recent searches for new physics from the CMS experiment are shown.

The first of which is a search for direct production of the tau slepton production in pp collisions at a center-of-mass energy of 13 TeV. The analysed data correspond to an integrated luminosity of 35.9 fb⁻¹ collected with the CMS detector in 2016 and 41.3 fb⁻¹ collected in 2017. The search is performed using events with two hadronically decaying tau leptons and a significant imbalance in the measured transverse momentum of the event.

The second search uses similar techniques to analyse direct production of stau sleptons with the CMS Phase II detector at the LH-LHC. This future new physics study assumes the collection of 3000 fb⁻¹ of proton-proton collision data produced at a center-of-mass energy of 14 TeV.

Presenter: Mr COLEGROVE, Owen (UCSB)

Session Classification: Young Physicists' Lightning Round Session 4

Contribution ID: 98

Type: **not specified**

Direct photon production at LHCb

Thursday, October 25, 2018 4:25 PM (10 minutes)

At small Bjorken- x , the large gluon number density in the nucleon leads to gluon recombination competing with gluon splitting, which could result in saturation of the gluon PDF. This gluon saturation has yet to be conclusively observed. Direct photon production provides sensitivity to gluon densities in protons and nuclei, and the forward acceptance of LHCb detector allows for measurements of this process at low Bjorken- x , providing an ideal probe of saturation effects. Progress towards the measurement of forward direct photon production using the LHCb detector will be presented.

Primary author: BOETTCHER, Thomas Julian (MIT)

Presenter: BOETTCHER, Thomas Julian (MIT)

Session Classification: Young Physicists' Lightning Round Session 1

Contribution ID: 99

Type: **not specified**

pyhf: pure-Python implementation of HistFactory models with autograd

Friday, October 26, 2018 5:35 PM (10 minutes)

The HistFactory p.d.f. template [CERN-OPEN-2012-016] is per-se independent of its implementation in ROOT and it is useful to be able to run statistical analysis outside of the ROOT, RooFit, RooStats framework. pyhf is a pure-python implementation of that statistical model for multi-bin histogram-based analysis and its interval estimation is based on the asymptotic formulas of “Asymptotic formulae for likelihood-based tests of new physics” [arxiv:1007.1727]. pyhf supports modern computational graph libraries such as TensorFlow and PyTorch in order to make use of features such as autodifferentiation and GPU acceleration.

Presenter: FEICKERT, Matthew (Southern Methodist University)

Session Classification: Young Physicists’ Lightning Round Session 4

Contribution ID: **100**

Type: **not specified**

Outreach

Thursday, October 25, 2018 2:30 PM (1 hour)

Presenters: Mr ADELMAN, Jahred (Yale); JEPSEN, Kathryn (Symmetry Magazine)

Session Classification: Cross-experiment discussion: breakout sessions

Contribution ID: **101**

Type: **not specified**

Calorimeters

Thursday, October 25, 2018 2:30 PM (1 hour)

Presenters: MILLER, David (University of Chicago); HIRSCHAUER, James (Fermi National Accelerator Laboratory)

Session Classification: Cross-experiment discussion: breakout sessions

Contribution ID: **102**

Type: **not specified**

Future colliders

Thursday, October 25, 2018 2:30 PM (1 hour)

Presenters: Dr CANEPA, Anadi (Fermilab); Dr LIPTON, Ron (Fermilab)

Session Classification: Cross-experiment discussion: breakout sessions

Contribution ID: **103**

Type: **not specified**

Advocacy

Thursday, October 25, 2018 2:30 PM (1 hour)

Presenters: Mr RAPPOCCIO, Salvatore (Buffalo); CHENG, Yangyang (Cornell University); Dr CHENG, Yangyang (Cornell University)

Session Classification: Cross-experiment discussion: breakout sessions

Contribution ID: **104**

Type: **not specified**

Moving to CERN

Friday, October 26, 2018 2:30 PM (1 hour)

Presenters: ACOSTA, Darin (University of Florida); Ms GONSKI, Julia (Harvard University)

Session Classification: Cross-experiment discussion: breakout sessions

Contribution ID: **105**

Type: **not specified**

Machine Learning

Friday, October 26, 2018 2:30 PM (1 hour)

Presenters: TRAN, Nhan (FNAL); GLEYZER, Sergei (University of Florida)

Session Classification: Cross-experiment discussion: breakout sessions

Contribution ID: **106**

Type: **not specified**

Tracking and timing detectors

Friday, October 26, 2018 2:30 PM (1 hour)

Presenters: METCALFE, Jessica (Argonne National Laboratory); GRAY, Lindsey (Fermilab)

Session Classification: Cross-experiment discussion: breakout sessions

Contribution ID: **107**

Type: **not specified**

Diversity and Inclusion

Friday, October 26, 2018 2:30 PM (1 hour)

Presenters: BLACK, Kevin; NARAIN, Meenakshi (Brown University)

Session Classification: Cross-experiment discussion: breakout sessions

Contribution ID: **108**

Type: **not specified**

Closing remarks

Friday, October 26, 2018 6:15 PM (15 minutes)

Presenters: MILLS, Corrinne; MILLS, corrinne (University of Illinois at Chicago)