# 2015 US LHC Users Association Meeting

# Report of Contributions

https://indico.fnal.gov/e/uslua2015

Contribution ID: **0** Type: **not specified**

# Welcome to Fermilab

*Thursday, 12 November 2015 09:00 (10 minutes)*

**Presenter:** LOCKYER, Nigel (Fermilab)

Contribution ID: **1** Type: **not specified**

# US LUA Chair's Report

*Thursday, 12 November 2015 09:10 (30 minutes)*

**Presenter:** NEWMAN, Harvey (Caltech)

Contribution ID: **2** Type: **not specified**

# Status and Outlook of the LHC

*Thursday, 12 November 2015 09:40 (30 minutes)*

**Presenter:** LAMONT, Mike (CERN)

Contribution ID: **3** Type: **not specified**

# LARP Report

*Thursday, 12 November 2015 10:10 (20 minutes)*

**Presenter:** Dr APOLLINARI, Giorgio (Fermilab)

Contribution ID: **4** Type: **not specified**

# ATLAS Status and Outlook

*Thursday, 12 November 2015 10:50 (30 minutes)*

**Presenter:** HEINEMANN, Beate (University of California Berkeley , LBNL)

Contribution ID: **5** Type: **not specified**

# CMS Status and Outlook

*Thursday, 12 November 2015 11:20 (30 minutes)*

**Presenter:** Dr D'HONDT, Jorgen (Vrije Universiteit Brussel)

Contribution ID: **6** Type: **not specified**

# LHCb Status and Run2 Results

*Thursday, 12 November 2015 13:30 (30 minutes)*

**Presenter:** WILLIAMS, Mike (MIT)

Contribution ID: **7** Type: **not specified**

# ALICE Status and Run2 Results

*Thursday, 12 November 2015 14:00 (30 minutes)*

**Presenter:** RENE, Bellwied (University of Houston)

Contribution ID: **8** Type: **not specified**

# CMS Run2 Results

*Thursday, 12 November 2015 15:50 (25 minutes)*

**Presenter:** DISSERTORI, Gunther (Eidgenoessische Tech. Hochschule Zuerich)

Contribution ID: **9** Type: **not specified**

# ATLAS Run2 Results

*Thursday, 12 November 2015 16:15 (25 minutes)*

**Presenter:** METCALFE, Jessica

Contribution ID: **10** Type: **not specified**

# Supporting Young Physicists

*Friday, 13 November 2015 09:10 (25 minutes)*

**Presenter:** Prof. MALLIK, Usha (The University of Iowa)

Contribution ID: **11** Type: **not specified**

# DOE Office of HEP Report

*Thursday, 12 November 2015 16:40 (25 minutes)*

**Presenter:** Dr ROLLI, Simona (DOE)

Contribution ID: **13** Type: **not specified**

# DOE Office of NP Report

*Thursday, 12 November 2015 17:05 (25 minutes)*

**Presenter:** HALLMAN, Tim

Contribution ID: **14** Type: **not specified**

# Careers Session (Panel, Q&A)

*Thursday, 12 November 2015 17:45 (1h 30m)*

Panel discussion moderated by Toyoko Orimoto.

Panelists: Ben Auerbach, Alexandra Carley Bennett, Thomas Gadfort, Jennifer Gimmell

**Presenters:** BENNETT, Alexandra Carley; AUERBACH, Ben; GIMMELL, Jennifer; Mr GADFORT, Thomas (Fermilab); ORIMOTO, Toyoko (Northeastern University)

Contribution ID: **15** Type: **not specified**

# Introduction; 2015 Trip to Washington

*Friday, 13 November 2015 08:45 (25 minutes)*

**Presenter:** NEWMAN, Harvey (Caltech)

Contribution ID: **17** Type: **not specified**

# US-CERN Relations and the LHC Program

*Friday, 13 November 2015 11:10 (25 minutes)*

**Presenter:** Dr VOSS, Ruediger (CERN)

Contribution ID: **18** Type: **not specified**

# Advisory Committee of CERN Users

*Friday, 13 November 2015 11:35 (20 minutes)*

**Presenter:** TORRENCE, Eric (University of Oregon)

Contribution ID: **20** Type: **not specified**

# Lightning Round Winners Announcement

*Friday, 13 November 2015 17:15 (10 minutes)*

Contribution ID: **21** Type: **not specified**

# Q&A and Discussion of US LHC Community Issues and US LUA

*Friday, 13 November 2015 17:25 (1 hour)*

Contribution ID: **22** Type: **not specified**

# US LUEC Committee Reports (Committee Chairs)

*Friday, 13 November 2015 13:55 (25 minutes)*

Contribution ID: **23** Type: **not specified**

# US HEP Program and Outlook

*Thursday, 12 November 2015 11:50 (30 minutes)*

**Presenter:** LOCKYER, Nigel (Fermilab)

Contribution ID: **24** Type: **not specified**

# P5 Plan: Progress and Visibility

*Thursday, 12 November 2015 17:30 (15 minutes)*

**Presenter:** Prof. RITZ, Steve (UCSC and SCIPP)

Contribution ID: **25** Type: **not specified**

# Fast tracking in the ATLAS Trigger: Why and How

*Thursday, 12 November 2015 14:30 (12 minutes)*

**Presenter:** SAXON, James (University of Chicago / ATLAS)

**Session Classification:** Young Physicists' Lightning Round Session 1

Contribution ID: **28** Type: **not specified**

# Exciting opportunities in a boosted hadronic diboson excess

*Thursday, 12 November 2015 14:54 (12 minutes)*

**Presenter:** ZHEN, Liu (Fermilab)

**Session Classification:** Young Physicists' Lightning Round Session 1

Contribution ID: **30** Type: **not specified**

# Higgs Decays to New Light Higgs Bosons in Boosted Tau Final States

*Thursday, 12 November 2015 14:42 (12 minutes)*

**Presenter:** RICCI-TAM, Francesca (University of California, Davis)

**Session Classification:** Young Physicists' Lightning Round Session 1

Contribution ID: **31** Type: **not specified**

# Exotic Higgs Decays: LHC Reach and Theoretical Constraints

*Thursday, 12 November 2015 15:18 (12 minutes)*

**Presenter:** KLING, Felix (Arizona / Fermilab)

**Session Classification:** Young Physicists' Lightning Round Session 1

Contribution ID: **32** Type: **not specified**

# Search for Higgs bosons decaying to $aa$ in the $\mu\mu\tau\tau$ final state in pp collisions at sqrt(s) = 8 TeV with the ATLAS Experiment

*Thursday, 12 November 2015 15:06 (12 minutes)*

**Presenter:** KAPLAN, Benjamin (New York University)

**Session Classification:** Young Physicists' Lightning Round Session 1

Contribution ID: **33** Type: **not specified**

# Polyurethane spray coating of aluminum wire bons to prevent corrosion and suppress resonant oscillations

*Friday, 13 November 2015 09:35 (12 minutes)*

**Presenter:** KURTH, Matthew (University of Texas at Dallas)

**Session Classification:** Young Physicists' Lightning Round Session 2

Contribution ID: **34** Type: **not specified**

# Measuring R(D*) = B(B -> D* tau nu)/B(B -> D* mu nu) at LHCb

*Friday, 13 November 2015 09:47 (12 minutes)*

**Presenter:** WIMBERLEY, Jack (University of Maryland)

**Session Classification:** Young Physicists' Lightning Round Session 2

Contribution ID: **35** Type: **not specified**

# Pentaquarks at LHCb

*Friday, 13 November 2015 09:59 (12 minutes)*

**Presenter:** JURIK, Nathan (Syracuse University)

**Session Classification:** Young Physicists' Lightning Round Session 2

Contribution ID: **36** Type: **not specified**

# Top quark-antiquark cross section from highly Lorentz-boosted jets

*Friday, 13 November 2015 10:11 (12 minutes)*

**Presenter:** ALYARI, Maral (State University of New York)

**Session Classification:** Young Physicists' Lightning Round Session 2

Contribution ID: **37** Type: **not specified**

# Search for evidence of new physics in multijet final states produced in pp collisions at sqrt(s) = 13 TeV using the ATLAS detector at the LHC

*Friday, 13 November 2015 10:23 (12 minutes)*

**Presenter:** AMADIO, Brian (Lawrence Berkeley National Laboratory)

**Session Classification:** Young Physicists' Lightning Round Session 2

Contribution ID: **38** Type: **not specified**

# Associative Memory Based L1 Tracking Trigger Demonstration for CMS Phase II Upgrade

*Friday, 13 November 2015 10:35 (12 minutes)*

**Presenter:** HU, Zhen (Fermilab)

**Session Classification:** Young Physicists' Lightning Round Session 2

Contribution ID: **39** Type: **not specified**

# ATLAS Trigger Operation in Run 2

*Friday, 13 November 2015 11:55 (12 minutes)*

**Presenter:** BERNIUS, Catrin (New York University)

**Session Classification:** Young Physicists' Lightning Round Session 3

Contribution ID: **40** Type: **not specified**

# Measurement of the Inelastic Proton-Proton Cross Section at sqrt(s) = 13 TeV with the ATLAS detector at the LHC

*Friday, 13 November 2015 12:07 (12 minutes)*

**Presenter:** AXEN, Brad (University of California, Berkeley)

**Session Classification:** Young Physicists' Lightning Round Session 3

Contribution ID: **41** Type: **not specified**

# Measurement of the top-Higgs coupling at CMS as a possible window to new physics

*Friday, 13 November 2015 12:19 (12 minutes)*

**Presenter:** WOLFE, Evan (University of Virginia)

**Session Classification:** Young Physicists' Lightning Round Session 3

Contribution ID: **42** Type: **not specified**

# Combined measurement of the Higgs Boson mass in pp collisions at sqrt(s) = 7 TeV and 8 TeV with the ATLAS and CMS experiments

*Friday, 13 November 2015 12:31 (12 minutes)*

**Presenter:** YANG, Hongtao (University of Wisconsin-Madison)

**Session Classification:** Young Physicists' Lightning Round Session 3

Contribution ID: **43** Type: **not specified**

# Strangeness production in small collision systems at the LHC

*Friday, 13 November 2015 12:43 (12 minutes)*

**Presenter:** BIANCHI, Livio (University of Houston)

**Session Classification:** Young Physicists' Lightning Round Session 3

Contribution ID: **44** Type: **not specified**

# Search for top-antitop quark resonances

*Friday, 13 November 2015 14:20 (12 minutes)*

**Presenter:** Mr SANDOVAL, Irving Daniel (University of Illinois at Chicago)

**Session Classification:** Young Physicists' Lightning Round Session 4

Contribution ID: **45** Type: **not specified**

# Differential two-particle correlations in ALICE

*Friday, 13 November 2015 14:32 (12 minutes)*

**Presenter:** PUJAHARI, Prabhat (Wayne State University)

**Session Classification:** Young Physicists' Lightning Round Session 4

Contribution ID: **46** Type: **not specified**

# Heavy Ion Jet Results from CMS

*Friday, 13 November 2015 17:00 (12 minutes)*

**Presenter:** TRAUGER, Hallie (University of Illinois at Chicago)

**Session Classification:** Young Physicists' Lightning Round Session 5: 6 presentations

Contribution ID: **47** Type: **not specified**

# Measurements of open heavy-flavour production in Pb-Pb collisions with ALICE at the LHC

*Friday, 13 November 2015 14:56 (12 minutes)*

**Presenter:** THOMAS, Deepa (University of Texas at Austin)

**Session Classification:** Young Physicists' Lightning Round Session 4

Contribution ID: **48** Type: **not specified**

# Searching for all-hadronic SUSY with Jet Substructure

*Friday, 13 November 2015 15:08 (12 minutes)*

**Presenter:** SWIATLOWSKI, Maximilian (University of Chicago)

**Session Classification:** Young Physicists' Lightning Round Session 4

Contribution ID: **49** Type: **not specified**

# Search for neutral MSSM heavy scalar Higgs Boson

*Friday, 13 November 2015 15:20 (12 minutes)*

**Presenter:** DODD, Laura Margaret (University Wisconsin-Madison)

**Session Classification:** Young Physicists' Lightning Round Session 4

Contribution ID: **50** Type: **not specified**

# Search for Supersymmetry in Same-Sign Dilepton Final states

*Friday, 13 November 2015 16:00 (12 minutes)*

**Presenter:** CARVER, Matthew (University of Florida)

**Session Classification:** Young Physicists' Lightning Round Session 5: 6 presentations

Contribution ID: **51** Type: **not specified**

# Search for Dark Matter with Higgs (to bbar) at ATLAS: Run 1 and beyond

*Friday, 13 November 2015 16:12 (12 minutes)*

**Presenter:** CHENG, Yangyang (University of Chicago)

**Session Classification:** Young Physicists' Lightning Round Session 5: 6 presentations

Contribution ID: **52** Type: **not specified**

# MadDM v2.0: Computation of Dark Matter Observables using Madgraph 5

*Friday, 13 November 2015 16:24 (12 minutes)*

**Presenter:** MOHLANBENG, Gopolang (Fermilab)

**Session Classification:** Young Physicists' Lightning Round Session 5: 6 presentations

Contribution ID: **53** Type: **not specified**

# Search for Supersymmetry in Higgs to diphoton final states with the razor variables at 8 TeV

*Friday, 13 November 2015 16:36 (12 minutes)*

**Presenter:** PENA, Cristian (Caltech)

**Session Classification:** Young Physicists' Lightning Round Session 5: 6 presentations

Contribution ID: **54** Type: **not specified**

# Measurement of the production of pairs of prompt J/psi mesons at sqrt(s) = 8 TeV with the ATLAS Detector

*Friday, 13 November 2015 16:48 (12 minutes)*

**Presenter:** WEINERT, Benjamin (Indiana University)

**Session Classification:** Young Physicists' Lightning Round Session 5: 6 presentations

Contribution ID: **55** Type: **not specified**

# Advanced Reconstruction Algorithms for the CMS High Granularity Calorimeter

*Friday, 13 November 2015 14:45 (11 minutes)*

**Presenter:** PEDRO, Kevin (Fermilab)

**Session Classification:** Young Physicists' Lightning Round Session 4