

## **Session Program**

**21-23 Mar 2016**



## **IoP HEPP and AP joint meeting**

### ***Parallel session 2***

University of Sussex, Chichester Lecture Theatre  
Falmer Brighton BN1 9QJ UK

## Tuesday 22 March

13:45

### Parallel session 2: Session 2A

**Session** | **Location:** University of Sussex, Chichester Lecture Theatre

13:45–14:00

**Search for SM Higgs Boson decaying to two photons in run II LHC collision at CMS**

**Speaker**

Louie Dartmoor Corpe

14:00–14:15

**Search for Standard Model Higgs bosons produced in association with a t quark pair and decaying to two b quarks in pp collisions at 13 TeV in ATLAS**

**Speaker**

William Dmitri Breaden Madden

14:15–14:30

**Search for the Higgs Boson decaying to two b-quarks, produced in association with leptonically decaying top quarks in Run 2 at ATLAS**

**Speaker**

Benjamin Sowden

14:30–14:45

**Search for SM Higgs bosons produced in association with a t quark pair and decaying to two b quarks in pp collisions at 13 TeV in ATLAS, in the boosted regime**

**Speaker**

Samuel Joseph Crawley

14:45–15:00

**Boosting Higgs pair production in the  $bb\bar{b}b\bar{b}$  final state with multivariate techniques**

**Speaker**

Cigdem Issever

15:00–15:15

**Search for rare exclusive Higgs boson decays to vector mesons and photons with ATLAS**

**Speaker**

James Broughton

15:15

13:45

### Parallel session 2: Session 2B

**Session** | **Location:** University of Sussex, Pevensey 1, Level 1 A06 (1A06)

13:45–14:00

**Measurement of the W and Z boson production cross sections at  $\sqrt{s} = 13$  TeV with the ATLAS detector**

**Speaker**

Rhys Edward Owen

14:00-14:15

**Measurement of the ZZ production cross section in pp collisions at  $\sqrt{s} = 13$  TeV with the ATLAS detector****Speaker**

Stefan Richter

14:15-14:30

**Measurement of the ZZ production cross section in pp collisions at  $\sqrt{s} = 13$  TeV with the ATLAS detector****Speaker**

Jonatan Rosten

14:30-14:45

**Measurement of the triple differential cross section of Drell-Yan production at 8 TeV with the ATLAS detector****Speaker**

Lewis James Armitage

14:45-15:00

**Measurements of the top quark pair production rate in pp collisions at 13 TeV with the ATLAS detector****Speaker**

Fabian Wilk

15:00-15:15

**Bs to mumu result from ATLAS****Speaker**

Marcella Bona

15:15

13:45

**Parallel session 2: Session 2C****Session** | **Location:** University of Sussex, Pevensey 1, Level 1 A07 (1A07)

13:45-14:00

**First neutrino oscillation results from NOvA****Speaker**

Luke Vinton

14:00-14:15

**Status of sterile neutrino global fits to neutrino oscillation data. Davio Cianci, Manchester**

14:15-14:30

**Charged-current neutral pion events in the ND280 for T2K. David Shaw, Lancaster****Speaker**

Dave Shaw

14:30-14:45

**Low energy physics at Hyper-Kamiokande****Speaker**

Thomas Dealtry

14:45-15:00

**Atmospheric-neutrino flux-integrated differential cross-section measurement in IceCube**

**Speaker**

Shivesh Mandalia

15:00–15:15

**Precision neutrino oscillation physics at the South Pole. Steven Wren, University of Manchester, UK**

15:15

13:45

**Parallel session 2: Session 2D****Session** | **Location:** University of Sussex, Pevensey 1, Level 2 D10 (2D10)

13:45–14:00

**Direct Dark Matter searches with the LUX and LZ experiments. Sally Shaw, University College London, UK**

14:00–14:15

**Status of the LUX-ZEPLIN experiment****Speaker**

Paolo Beltrame

14:15–14:30

**Multiple interaction event rejection in the LZ dark matter detector. Thomas Davison, University of Edinburgh, UK**

14:30–14:45

**DEAP-3600 dark matter detector****Speaker**

Dr Nasim Fatemighomi

14:45–15:00

**Position reconstruction in DEAP-3600****Speaker**

Navin Seeburn

15:15

13:45

**Parallel session 2: Session 2E****Session** | **Location:** University of Sussex, Pevensey 1, Level 2 D11 (2D11)

13:45–14:00

**The ATLAS muon trigger in Run-2****Speaker**

Savanna Marie Shaw

14:00–14:15

**Generalisation in machine learning for HEP****Speaker**

Thomas James Stevenson

14:15–14:30

**Gaseous photomultiplier development for position-sensitive VUV light detection in liquid argon****Speaker**

Matthew Thiesse

14:30–14:45

**Development of a  $^3\text{He}$ -based absolute calibration magnetometer for the muon g-2 experiment****Speaker**

Sam Henry

15:15