

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 $bb\bar{b}\bar{b}$ 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 ^3He -based absolute calibration magnetometer for the muon g-2 experiment

Speaker
Sam Henry

15:15