Session Program

Mar 21 – 23, 2016

IoP HEPP and AP joint meeting

Parallel session 3

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

Tue, March 22

4:30 PM

Parallel session 3: Session 3A

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

4:30 – 4:45 PM

Search for new resonances decaying to a W or Z boson and a Higgs in 0,1,2 lepton channels in pp collisions at 13 TeV with the ATLAS detector

Speaker
Stephen Jiggins

4:45 – 5:00 PM

Search for beyond SM Higgs boson decaying to two tau leptons in Run-II ATLAS

Speaker
Guillermo Nicolas Hamity

5:00 – 5:15 PM

Perturbative unitarity bound on the parameter space in composite two Higgs doublet models. Emine Yildirim, University of Southampton, UK

5:15 – 5:30 PM **MonoH to bb in association with dark matter**

Speaker
Matt Baca

5:30 – 5:45 PM

Searches for neutral BSM Higgs bosons with final states containing two taus

Speaker
Adinda De Wit

5:45 – 6:00 PM

The search for high mass resonances in Diboson decays at ATLAS in Run-2

Speaker
Joseph Stanford Ennis

6:00 PM

4:30 PM

Parallel session 3: Session 3B

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

4:30 – 4:45 PM

Search for supersymmetry in pp collisions at CMS at a centre of mass energy of 13 TeV

Speaker
Dominic Smith

4:45 – 5:00 PM

Summary of searches for the electroweak production of supersymmetric particles in √s=8 TeV pp collisions in ATLAS

Speakers
Itzebelt Santoyo Castillo, Itzebelt Santoyo Castillo

5:00 – 5:15 PM

Data-driven background estimation techniques used in ATLAS searches for SUSY

Speaker
Calum Michael Macdonald

5:15 – 5:30 PM **Direct stop pair production in the fully hadronic channel at ATLAS**

Speaker
Dave Lewis

6:00 PM

4:30 PM

Parallel session 3: Session 3C

Session | **Location:** University of Sussex, Pevensey 1, Level 1 A07 (1A07)

4:30 – 4:45 PM

NC gamma, an exclusive channel for neutrino photo-production in GENIE neutrino event generator. Pierre Lasorak, Queen Mary, University of London, UK

4:45 – 5:00 PM **Nucleon final state interaction in NEUT**

Speaker
Wing Yan Ma

5:00 – 5:15 PM

A truth study using transverse variables to characterise nuclear effects in neutrino–nucleus scattering

Speaker
Luke Pickering

5:15 – 5:30 PM **Neutrino coherent pion production**

Speaker
Paul Martins

5:30 – 5:45 PM

Shower reconstruction in LAr for the detection of pi0s in the DUNE far detector. Michael Wallbank, University of Sheffield, UK

Speaker
Michael Wallbank

5:45 – 6:00 PM

Particle Identification in the 35 ton and Cosmogenic simulations. Thomas Warburton, University of Sheffield, UK

Speaker
Mr Thomas Warburton

6:00 PM

4:30 PM

Parallel session 3: Session 3D

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

4:30 – 4:45 PM

Liquid level monitoring with a differential capacitive sensor for the LUX-ZEPLIN dark matter experiment. Fengting Liao, University of Oxford, UK

Speaker
FengTing Liao

4:45 – 5:00 PM

Simplified readout for CYGNUS-TPC: a massive directional dark matter detector. Anthony Ezeribe, University of Sheffield, UK

5:00 – 5:15 PM

Prospects for the direct detection of dark matter with inelastic transitions of xenon

Speakers
Christopher McCabe, Christopher Mccabe

5:15 – 5:30 PM

UK materials screening for the LZ dark matter direct detection experiment and future rare event searches

Speaker
James Edward Young Dobson

5:30 – 5:45 PM

Boulby Underground Laboratory: update of science hosted and infrastructure for new projects. Chris Toth, STFC, UK

5:45 – 6:00 PM

Radio-purity strategy for the SuperNEMO experiment. Xinran Liu, University College London, UK

6:00 PM

4:30 PM

Parallel session 3: Session 3E

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

4:30 – 4:45 PM **Reactor monitoring with T2K anti-neutrino technology**

Speaker
Yan Jie Schnellbach

4:45 – 5:00 PM **Muon radiography for carbon storage monitoring**

Speaker
David Woodward

5:00 – 5:15 PM

Prototype atom interferometer for fundamental physics. David Morris, University of Liverpool, UK

5:15 – 5:30 PM **Fabrication and characterisation of 3D diamond detectors**

Speaker
Steven Alexander Murphy

5:30 – 5:45 PM **3D diamond detector development**

Speaker
Giulio Tiziano Forcolin

6:00 PM