

Session Program

7-10 Apr 2019



IoP Joint HEPP and APP Annual Conference 2019

Parallel stream 2

Imperial College London, Clore Lecture Theatre, Huxley 213
Imperial College London Prince Consort Road South Kensington London

Monday 8 April

14:00

Parallel stream 2: Session 1

Session | **Location:** Imperial College London, Huxley 340 | **Conveners:**
Antonin Vacheret, Dr Antonin Vacheret, Wilf Shorrock, Teppei Katori

14:00–14:15

Search for long-lived neutral particles that decay into displaced jets in the ATLAS detector

Speaker

Ms Alice Morris

14:15–14:30

Search for the Higgs boson decay to a pair of muons with the ATLAS detector at the LHC

Speaker

Miha Zgubic

14:30–14:45

Search for $H \rightarrow e\bar{e}$ using 140/fb of 13 TeV pp collision data with ATLAS experiment

Speaker

Russell James Turner

14:45–15:00

IceCube astrophysical neutrino 7.5-year data

Speaker

Teppei Katori

15:00–15:15

Noise Rejection Method Using Spherical Harmonic Decomposition

Speaker

Elena Massera

15:15–15:30

Status of the LUX-ZEPLIN (LZ) dark matter experiment

Speaker

Brais Lopez Paredes

15:30–15:45

Radon Backgrounds in LZ

Speaker

Mr Umit Utku

16:30

Tuesday 9 April

11:00

Parallel stream 2: Session 2

Session | **Location:** Imperial College London, Huxley 340 | **Conveners:**
Samuel Webb, Paul Scovell, Jonathon Mark Langford, Paul Scovell

11:00–11:15 **Modelling Backgrounds and Searching for WIMPs in DEAP-3600**

Speaker
Joseph Walding

11:15–11:30

Differential measurement of the Z/γ ratio with the CMS experiment in pp collisions at 13 TeV

Speaker
Giacomo Zecchinelli

11:30–11:45

Search for dark matter produced in association with bottom or top quarks with the ATLAS detector

Speaker
Edward James Thorpe

11:45–12:00

Associated production of a J/ψ + photon at ATLAS

Speaker
Amy Tee

12:00–12:15

Search for a heavy Higgs boson decaying into a Z boson and another heavy Higgs boson in the $l\bar{l}b\bar{b}$ final state in 13 TeV pp collision with ATLAS detector

Speaker
Wai Yuen Chan

12:15–12:30

Searching for dark matter in DEAP-3600 in a 758 tonne-day data set.

Speaker
Ashlea Kemp

13:00

Wednesday 10 April

11:00

Parallel stream 2: Session 3

Session | **Location:** Imperial College London, Huxley 340 | **Conveners:** Mark Scott, Tracey Berry, Wilf Shorrocks

11:00-11:15

Searches for electroweak supersymmetry in final states containing one lepton, two b-tagged jets and missing transverse energy at the ATLAS experiment.

Speaker

Matthew James Sullivan

11:15-11:30

Non-parametric Bayesian event reconstruction in Super-Kamiokande detector

Speaker

Artur Sztuc

11:30-11:45

Electron neutrino selection in the MicroBooNE LArTPC using the Pandora pattern recognition reconstruction

Speaker

Wouter Van De Pontseele

11:45-12:00

Applications of machine learning to the identification of particle etch pits in Moedal NTD (Nuclear Track Detector) Images.

Speaker

Lewis Richard Millward

12:00-12:15

Boosting the Search for New Physics in bb Events

Speaker

Lydia Audrey Beresford

12:15-12:30

Search for Contact Interactions using 140fb⁻¹ of pp collision data collected at $\sqrt{s}=13\text{TeV}$ with the ATLAS detector

Speaker

Deshan Kavishka Abhayasinghe

13:00