



# **IoP 2022 - Joint APP/HEPP Conference**

## **Sunday, 3 April 2022**

**Social: Public engagement drop-in session (18:00 - 19:00)**

-Conveners: Sophy Palmer; Julie Kirk

**Social: Informal pub gathering (Nags Head) (19:00 - 20:00)**

# Monday, 4 April 2022

## Social: Poster Session (18:15 - 20:15)

time	[id] title	presenter
18:15	[446] Calibration of the UK Hyper-KiloMetric Submarine Deep Detector prototype for undersea muography measurements	JENKINS, Sam
18:15	[445] H $\alpha$ -doping of liquid xenon detectors to search for neutrinoless double beta decay.	JACQUET, Elisa
18:15	[408] A new approach for LHC event analysis using graph networks	MULLIN, Anna
18:15	[447] Imaging Subterranean Structures using Muon Tomography	STOWELL, Patrick
18:15	[409] Electron calibration for the Level-1 Calorimeter trigger at the ATLAS Experiment	MARINESCU, Mihaela
18:30	[448] Charged Pion Interaction Uncertainties with Geant 4 Reweight	THORPE, Christopher
18:30	[444] Large-scale data processing and monitoring for run 3 with Analysis Productions at LHCb	WHITE, Dylan Jaide
18:30	[418] Hyper-Kamiokande sensitivity and systematic uncertainties studies	XIE, Zhenxiong
18:30	[443] Search for Resonant Production from $hh \rightarrow b\bar{b}b\bar{b}$ in ATLAS Detector using Superboosted Analysis	NORISAM, Raif
18:30	[419] Sub GeV-Scale Particle Identification with a Machine Learning Technique in the Hyper-Kamiokande Detector	GAO, Joanna
18:45	[449] ATLAS Virtual Visits - Take part from anywhere in the world	RENNIE, Adam
18:45	[424] Fiducial and differential measurements of $W+W^-$ production in decay topologies inspired by searches for electroweak supersymmetry in two-lepton final states.	RUTHERFORD COLMENARES, Sebastian
18:45	[423] Application of jet density corrections to forward topo towers using the ATLAS detector in the context of $ttZ(Z \rightarrow \nu\nu)$ .	POSTILL, Michael
18:45	[422] Understanding Neutron Backgrounds in the LUX-ZEPLIN Dark Matter Search using Multiple Scatter Events	ORPWOOD, Jonathan
18:45	[425] Validating the Field Response Simulation of the Short-Baseline Near Detector (SBND)	SCOTT, Harry
19:00	[441] Tuning NEUT's physics models using a new electron scattering extension	MCELWEE, Jordan
19:00	[435] Selecting antineutrino charged current events with photons in the final state using the T2K near detector	LAMERS JAMES, Menai
19:00	[437] Low-level reconstruction improvements for future low-energy excess (LEE) Pandora-based analyses at MicroBooNE	WRESILO, Karolina
19:00	[420] Background in Darkside-20k	SANTONE, Daria
19:00	[438] Searching for Axion-Like Particles with The Mu3e Experiment	HUGHES, Sean
19:15	[426] Probing New Physics at the LHC: the EFT Pathway	THOMAS, Marion
19:15	[421] Muon Analysis at SNO+	DIXON, Katharine
19:15	[429] Research and development towards a next-generation dark matter experiment at Boulby Underground Laboratory.	TRANTER, Jemima
19:15	[433] Rapid Prototype Plastic Scintillators for Gamma Detection	GREER, James
19:15	[431] Monitoring Nuclear Sites via Anti-Neutrino Detection	DASARI, Joel

19:30	[428] Investigating the Material Compatibility of Gadolinium Sulphate with Photosensors via Long-term Soak Tests	TOTH, Christopher
19:30	[432] Measurement of Charged Pion Production Cross-Sections for Interactions of Muon Neutrinos on Argon in MicroBooNE	DETJE, Jan Philip
19:30	[430] First Results of the 2021 FASER Calorimeter Test Beam	CAVANAGH, Charlotte
19:30	[442] Classification of the $^{13}\text{C}(\alpha,n)^{14}\text{O}$ background in the SNO+ antineutrino analyses	MILLS, Charlie
19:30	[410] Determination of nuclear fission reactor range using water Cherenkov detectors	WILSON, Stephen
19:30	[427] Atom Interferometers for Fundamental Physics	THROSSELL, Henry
19:45	[412] Simulation studies into the main backgrounds for ANUBIS	BURR, Jon
19:45	[439] A new technique for the reconstruction of the interaction vertices inside the CMS detector at HL-LHC	SALVI, Giovanna
19:45	[436] Comparing Reconstruction Paradigms in MicroBooNE's First Low Energy Excess Analyses	SHI, Jingyuan
19:45	[440] Selection of muon neutrino charged-current interactions with improved acceptance in the T2K off-axis near detector	XU, Yongheng
19:45	[417] Simulation Studies of the Hyper Kamiokande Outer Detector	MILLER, Ewan
19:45	[415] Searching for supernova relic neutrinos with SK-Gd	FANNON, Jack
20:00	[452] Reparameterisations of the neutrino mixing matrix in T2K's oscillation analysis	LOPEZ MORENO, Andres
20:00	[416] Using DM-Ice17 as an assistance tool within the IceCube Neutrino Observatory	CLARK, Rogan
20:00	[434] Using MCMC on Hyper-Kamiokande	ISRAEL, Henry
20:00	[413] FERS-5200: a distributed Front-End Readout System for multidetector arrays	VENTURINI, Yuri
20:00	[411] Searches for Exclusive Flavour-Violating Decays of the Higgs and Z Bosons to a Meson and a Photon with the ATLAS Experiment	WARD, Robert
20:00	[414] An Approach to the Hyper-Kamiokande Outer Detector Clustering Algorithm for Cosmic Muons	BURTON, George

# Tuesday, 5 April 2022

**Social: Public engagement lunch, talks and networking (registration required) (12:30 - 13:30)**

-Conveners: Sophy Palmer; Julie Kirk

**Social: Banquet Dinner (18:00 - 23:00)**