

IoP 2021 - Joint APP/HEPP/NP Conference

Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome - The Principal (Edinburgh)

Monday 12 April 2021 09:45 (15 minutes)

Presenter: MURPHY, Alex (The University of Edinburgh (GB))

Contribution ID: 2

Type: **not specified**

NP ECR Prize 2020 - Making the calculations of nuclear matrix elements easier

Tuesday 13 April 2021 16:15 (30 minutes)

Contribution ID: 3

Type: **not specified**

APP Prize talk

Tuesday 13 April 2021 16:15 (30 minutes)

<https://ukri.zoom.us/j/91843095434?pwd=b1l4K0lsRmVHQm13eGlhbkdjQWh3UT09>

Presenter: FRUTH, Theresa

Contribution ID: 4

Type: **not specified**

Conference Prizes and Closing Remarks

Thursday 15 April 2021 16:15 (30 minutes)

Contribution ID: 5

Type: **not specified**

Closing remarks

Contribution ID: 6

Type: **not specified**

The Next Decade in Particle Physics

Monday 12 April 2021 10:00 (30 minutes)

Presenter: BUTTERWORTH, Jonathan (UCL)

Session Classification: Joint Plenary

Contribution ID: 7

Type: **not specified**

Hadron Physics

Monday 12 April 2021 10:30 (30 minutes)

Presenter: Prof. IRELAND, David (University of Glasgow)

Session Classification: Joint Plenary

Contribution ID: 8

Type: **not specified**

Detector Technology and Quantum sensing

Presenter: MAVROKORIDIS, k (University of Liverpool (GB))

Session Classification: HEPP plenary

Contribution ID: 9

Type: **not specified**

HEPP prize talk: The g-2 experiment at Fermilab

Presenters: CHISLETT, Rebecca; CHISLETT, Rebecca Thalatta (University of London (GB))

Session Classification: HEPP plenary

Contribution ID: **10**

Type: **not specified**

LHC upgrades

Monday 12 April 2021 15:15 (30 minutes)

Presenter: Dr MCMAHON, Stephen (Science and Technology Facilities Council STFC (GB))

Session Classification: HEPP plenary

Contribution ID: **11**

Type: **not specified**

Searches for BSM physics at the LHC

Monday 12 April 2021 15:45 (30 minutes)

Presenter: GAO, Yanyan (University of Edinburgh (GB))

Session Classification: HEPP plenary

Contribution ID: 12

Type: **not specified**

Searches for Dark Sector Physics at the LHC

Monday 12 April 2021 16:15 (30 minutes)

Presenter: ILTEN, Philip (University of Cincinnati (US))

Session Classification: HEPP plenary

Contribution ID: 13

Type: **not specified**

Reserved slot for HEPP AGM

Session Classification: HEPP plenary

Contribution ID: 14

Type: **not specified**

Gravitational waves

Tuesday 13 April 2021 10:00 (30 minutes)

Presenter: HOUGH, James (University of Glasgow)

Session Classification: Joint Plenary

Contribution ID: 15

Type: **not specified**

Science at FAIR

Tuesday 13 April 2021 10:30 (30 minutes)

Presenter: Prof. GIUBELLIO, Paulo

Session Classification: Joint Plenary

Contribution ID: **16**

Type: **not specified**

The SM and the Higgs physics at the LHC

Tuesday 13 April 2021 11:30 (30 minutes)

Presenter: LOHWASSER, Kristin (University of Sheffield (GB))

Session Classification: HEPP plenary

Contribution ID: 17

Type: **not specified**

HEPP AGM

Tuesday 13 April 2021 12:00 (30 minutes)

Session Classification: HEPP plenary

Contribution ID: **18**

Type: **not specified**

Storage Ring Physics

Tuesday 13 April 2021 11:30 (30 minutes)

Presenter: LITVINOV, Yuri (GSI, Darmstadt)

Session Classification: NP/APP plenary

Contribution ID: **19**

Type: **not specified**

NP Summer school Prize talk

Tuesday 13 April 2021 12:00 (30 minutes)

Presenter: NEWTON, Ruth (University of York)

Session Classification: NP/APP plenary

Contribution ID: 20

Type: **not specified**

Theory and Phenomenology

Wednesday 14 April 2021 10:00 (30 minutes)

Presenter: Dr SMILLIE, Jenni

Session Classification: Joint Plenary

Contribution ID: 21

Type: **not specified**

The year that was COVID

Wednesday 14 April 2021 10:30 (30 minutes)

Presenter: THOMSON, Mark Andrew (STFC)

Session Classification: Joint Plenary

Contribution ID: 22

Type: **not specified**

Short baseline neutrinos

Presenters: VACHERET, Antonin (Imperial College London); Dr VACHERET, Antonin (Imperial College London)

Session Classification: HEPP plenary

Contribution ID: 23

Type: **not specified**

Neutrino Oscillation Physics

Wednesday 14 April 2021 14:00 (30 minutes)

Presenters: WEBER, Alfons (STFC/RAL & Uni Oxford); Prof. WEBER, Alfons (University of Oxford (GB))

Session Classification: HEPP plenary

Contribution ID: 24

Type: **not specified**

Chief Executive Report

Wednesday 14 April 2021 14:45 (30 minutes)

Presenter: THOMSON, Mark Andrew (STFC)

Session Classification: STFC town meeting

Contribution ID: 25

Type: **not specified**

Report from Science Board

Wednesday 14 April 2021 15:15 (30 minutes)

Presenter: SHEARS, Tara (University of Liverpool (GB))

Session Classification: STFC town meeting

Contribution ID: 26

Type: **not specified**

Report from Advisory Panels

Wednesday 14 April 2021 15:45 (30 minutes)

Session Classification: STFC town meeting

Contribution ID: 27

Type: **not specified**

Discussion

Wednesday 14 April 2021 16:15 (30 minutes)

Session Classification: STFC town meeting

Contribution ID: 28

Type: **not specified**

Nuclear Applications

Thursday 15 April 2021 10:00 (30 minutes)

Presenter: HARKNESS, Laura (University of Liverpool)

Session Classification: Joint Plenary

Contribution ID: 29

Type: **not specified**

Neutrino Mass Measurements

Thursday 15 April 2021 10:30 (30 minutes)

Presenter: MERTENS, Susanne (Max Planck Institute for Physics)

Session Classification: Joint Plenary

Contribution ID: **30**

Type: **not specified**

Dark Matter Summary

Thursday 15 April 2021 13:30 (30 minutes)

Presenter: DOBSON, Jim

Session Classification: Joint Plenary

Contribution ID: 31

Type: **not specified**

Indirect methods to constrain nuclear astrophysics: the case of $^{12}\text{C}+^{12}\text{C}$ fusion

Thursday 15 April 2021 14:00 (30 minutes)

Presenter: Prof. TUMINO, Aurora

Session Classification: Joint Plenary

Contribution ID: 32

Type: **not specified**

Neutrino-Nucleus Interactions

Thursday 15 April 2021 14:45 (30 minutes)

Presenter: Dr LU, Xianguo (University of Oxford)

Session Classification: HEPP plenary

Contribution ID: 33

Type: **not specified**

Reconstruction Machine Learning

Thursday 15 April 2021 15:15 (30 minutes)

Presenter: OLAIYA, Emmanuel Olatunji (Science and Technology Facilities Council STFC (GB))

Session Classification: HEPP plenary

Contribution ID: **34**

Type: **not specified**

Cosmic Rays

Thursday 15 April 2021 14:45 (30 minutes)

Presenter: WATSON, Alan (University of Leeds)

Session Classification: NP/APP plenary

Contribution ID: 35

Type: **not specified**

QGP physics with ALICE

Thursday 15 April 2021 15:15 (30 minutes)

Presenters: EVANS, David (School of Physics and Astronomy-University of Birmingham); EVANS, David (University of Birmingham (GB))

Session Classification: NP/APP plenary

Contribution ID: 36

Type: **not specified**

Precision Isotop Measurements

Monday 12 April 2021 15:15 (30 minutes)

Presenter: REITER, Moritz Pascal (TITAN)

Session Classification: NP/APP plenary

Contribution ID: 37

Type: **not specified**

AGATA

Monday 12 April 2021 15:45 (30 minutes)

Presenter: Prof. BENTLEY, Michael (University of York)

Session Classification: NP/APP plenary

Contribution ID: **38**

Type: **not specified**

Recent Advances in Nuclear Structure Theory

Monday 12 April 2021 16:15 (30 minutes)

Presenter: Dr BARBIERI, Carlo (University of Surrey)

Session Classification: NP/APP plenary

Contribution ID: 39

Type: **not specified**

Indirect Method to Constrain Nuclear Astrophysics: the case of $^{12}\text{C}+^{12}\text{C}$ fusion

Presenter: Prof. TUMINO, Aurora (Kore University of Enna & INFN-LNS)

Session Classification: NP/APP plenary

Contribution ID: 40

Type: **not specified**

NP ECR Prize 2021

Session Classification: NP/APP plenary

Contribution ID: **41**

Type: **not specified**

ISS physics

Presenters: Dr SHARP, David (University of Manchester (GB)); SHARP, David (The University of Manchester)

Contribution ID: 42

Type: **not specified**

Cherenkov Telescope Array

Wednesday 14 April 2021 13:30 (30 minutes)

Presenter: Prof. LAPINGTON, Jon (University of Leicester)

Session Classification: NP/APP plenary

Contribution ID: 43

Type: **not specified**

ISS physics

Wednesday 14 April 2021 14:00 (30 minutes)

Presenter: SHARP, David (University of Manchester (GB))

Session Classification: NP/APP plenary

Contribution ID: 44

Type: **not specified**

Short Baseline Neutrinos

Wednesday 14 April 2021 13:30 (30 minutes)

Presenter: GUENETTE, Roxanne (Harvard University)

Session Classification: HEPP plenary

Contribution ID: 45

Type: **not specified**

Quark Flavour Physics

Monday 12 April 2021 11:30 (30 minutes)

Presenter: GERSABECK, Evelina Mihova (University of Manchester (GB))

Session Classification: Joint Plenary

Contribution ID: 46

Type: **not specified**

HEPP prize talk: The g-2 experiment at Fermilab

Monday 12 April 2021 12:00 (45 minutes)

Rebecca Chislett (UCL) -

featuring also Alex Keshavarzi (Manchester), Saskia Charity (FNAL) and Joe Price (Liverpool)

Presenter: CHISLETT, Rebecca

Session Classification: Joint Plenary

Contribution ID: 47

Type: **not specified**

Neutrino and Dark Matter Liquid Argon Detector Technologies

Thursday 15 April 2021 15:45 (30 minutes)

Presenter: MAVROKORIDIS, k (University of Liverpool (GB))

Session Classification: HEPP plenary

Contribution ID: 48

Type: **not specified**

ECR Prize talk

Thursday 15 April 2021 15:45 (30 minutes)

Presenter: Dr HENDERSON, Jack (University of Surrey)

Session Classification: NP/APP plenary

Contribution ID: 49

Type: **not specified**

Measurement of the Higgs boson mass decaying to a pair of Z bosons in the four lepton channel using pp collision events collected by the ATLAS detector at CERN

Monday 12 April 2021 13:30 (15 minutes)

Presenter: SAOUCHA, Kamal (University of Sheffield (GB))

Session Classification: Parallel Stream 5

Contribution ID: 50

Type: **not specified**

A Search with the ATLAS Detector for the Standard Model Higgs Boson Produced In Association with a Top Quark Pair and Decaying to a Bottom Quark Pair (ttH(bb))

Monday 12 April 2021 14:00 (15 minutes)

Presenter: Mr THOMAS, Dave (Royal Holloway, University of London (GB))

Session Classification: Parallel Stream 5

Contribution ID: 51

Type: **not specified**

The ttH(bb) leptonic analysis at ATLAS

Monday 12 April 2021 13:45 (15 minutes)

Presenter: BOOTH, Callum (Royal Holloway University of London)

Session Classification: Parallel Stream 5

Contribution ID: 52

Type: **not specified**

Constraining the Higgs-top Yukawa Coupling with the ATLAS Experiment at the LHC

Monday 12 April 2021 14:15 (15 minutes)

Presenter: CARTER, Thomas Michael (The University of Edinburgh)

Session Classification: Parallel Stream 5

Contribution ID: 53

Type: **not specified**

Adversarial Neural Networks for ttH(yy)

Monday 12 April 2021 14:30 (15 minutes)

Presenter: TAKEVA, Emily Petrova (The University of Edinburgh (GB))

Session Classification: Parallel Stream 5

Contribution ID: 54

Type: **not specified**

Search for the Higgs boson decaying to two electrons using the full Run 2 data set collected by the CMS detector at the LHC

Monday 12 April 2021 14:45 (15 minutes)

Presenter: DAVIES, Joe (University of London (GB))

Session Classification: Parallel Stream 5

Contribution ID: 55

Type: **not specified**

Development of a Z+jets dedicated treatment within the scope of the search for the decay of the Higgs Boson to charm quarks with the ATLAS experiment

Tuesday 13 April 2021 14:45 (15 minutes)

Presenter: MENDES JACQUES DA COSTA, Antonio Manuel (University of Birmingham (GB))

Session Classification: Parallel Stream 5

Contribution ID: 56

Type: **not specified**

Axion searches in rare Higgs decays at ATLAS

Tuesday 13 April 2021 15:00 (15 minutes)

Presenter: RUBY, Adam James (University of Liverpool (GB))

Session Classification: Parallel Stream 5

Contribution ID: 57

Type: **not specified**

A search for invisibly decaying Higgs Bosons in the fully hadronic final state, targeting the $t\bar{t}H$ and VH production modes

Tuesday 13 April 2021 15:15 (15 minutes)

Presenter: Mr ANTHONY, David Benjamin (University of Bristol (GB))

Session Classification: Parallel Stream 5

Contribution ID: 58

Type: **not specified**

Searches for Higgs boson pair production in the $b\bar{b}\tau\tau$ final state with 139 fb⁻¹ of pp collision data with the ATLAS detector

Tuesday 13 April 2021 15:30 (15 minutes)

Presenter: LI, Zhiyuan (University of Liverpool (GB))

Session Classification: Parallel Stream 5

Contribution ID: 59

Type: **not specified**

Optimizing the search for pair-production of Higgs Bosons in the bbbb final state using data collected from proton-proton collisions in the ATLAS detector.

Tuesday 13 April 2021 15:45 (15 minutes)

Presenter: BORGNA, Lucas Santiago (UCL)

Session Classification: Parallel Stream 5

Contribution ID: 60

Type: **not specified**

Combining di-Higgs decay channels to measure a combined limit on the di-Higgs cross section with the ATLAS detector

Tuesday 13 April 2021 16:00 (15 minutes)

Presenter: HEHIR, Natasha (Queen Mary University of London (GB))

Session Classification: Parallel Stream 5

Contribution ID: 61

Type: **not specified**

Design of an Imaging Collimator for application in low dose Molecular Breast Imaging

Thursday 15 April 2021 11:30 (15 minutes)

Presenter: BROWN, Hannah (University of Liverpool)

Session Classification: Parallel Stream 5

Contribution ID: 62

Type: **not specified**

Cross-section measurements for the production of theragnostic terbium isotopes at the Birmingham cyclotron facility

Thursday 15 April 2021 11:45 (15 minutes)

Presenter: TRINDER, Rebeckah (University of Birmingham)

Session Classification: Parallel Stream 5

Contribution ID: 63

Type: **not specified**

Prompt gamma-ray measurements with nanoparticles for in vivo range verification and dose enhancement in protontherapy

Thursday 15 April 2021 12:00 (15 minutes)

Presenter: SONIA, Escibano-Rodriguez (University of York)

Session Classification: Parallel Stream 5

Contribution ID: 64

Type: **not specified**

Improving Gamma-Ray Position Resolution in Pixelated CZT Detectors for use in Molecular Breast Imaging Applications

Thursday 15 April 2021 12:15 (15 minutes)

Presenter: RINTOUL, Ellis (University of Liverpool)

Session Classification: Parallel Stream 5

Contribution ID: 65

Type: **not specified**

Measurements of W^+W^- production cross sections at $\sqrt{s} = 13$ TeV with the ATLAS detector

Monday 12 April 2021 13:30 (15 minutes)

Presenter: MACDONALD, Jack (University of Sheffield (GB))

Session Classification: Parallel Stream 1

Contribution ID: **66**

Type: **not specified**

Semileptonic Vector Boson Scattering at the ATLAS detector

Monday 12 April 2021 13:45 (15 minutes)

Presenter: FITSCHEN, Tobias (University of Birmingham (GB))

Session Classification: Parallel Stream 1

Contribution ID: 67

Type: **not specified**

Measurement of differential cross-sections of top-quark pair production in association with additional jets in highly boosted events

Monday 12 April 2021 14:00 (15 minutes)

Presenter: JAMIESON, Jonathan (University of Glasgow (GB))

Session Classification: Parallel Stream 1

Contribution ID: **68**

Type: **not specified**

Search for tZq production in association with a Z boson in the dilepton final state

Monday 12 April 2021 14:15 (15 minutes)

Presenter: COLDHAM, Kathryn Wendy (Brunel University (GB))

Session Classification: Parallel Stream 1

Contribution ID: 69

Type: **not specified**

New dark matter searches with missing energy and b-quark final states at ATLAS

Monday 12 April 2021 14:30 (15 minutes)

Presenter: BASSON, Candice (University of Manchester (GB))

Session Classification: Parallel Stream 1

Contribution ID: 70

Type: **not specified**

Search for invisible particles in association with jets using the ATLAS detector

Monday 12 April 2021 14:45 (15 minutes)

Presenter: KELLY, Aidan Sean (University College London (UK))

Session Classification: Parallel Stream 1

Contribution ID: 71

Type: **not specified**

Alpha –Neutron Background Characterisation Within the SNO+ Detector

Monday 12 April 2021 13:30 (15 minutes)

Presenter: COX, Matthew

Session Classification: Parallel Stream 3

Contribution ID: 72

Type: **not specified**

Cosmogenic Muon Induced Background Tagging in the SNO+ Scintillator Phase

Monday 12 April 2021 13:45 (15 minutes)

Presenter: NOLAN, Lorna (University of London)

Session Classification: Parallel Stream 3

Contribution ID: 73

Type: **not specified**

Search for Heavy Neutral Leptons using the ArgoNeuT detector at Fermilab

Monday 12 April 2021 14:00 (15 minutes)

Presenter: GREEN, Patrick James (University of Manchester (GB))

Session Classification: Parallel Stream 3

Contribution ID: 74

Type: **not specified**

SNO+, Supernova neutrinos and Supernova Burst Trigger

Monday 12 April 2021 14:15 (15 minutes)

Presenter: Mr RIGAN, Michal (University of Sussex)

Session Classification: Parallel Stream 3

Contribution ID: 75

Type: **not specified**

Improved reconstruction of charged pions and other particles in the NOvA near detector

Monday 12 April 2021 14:30 (15 minutes)

Presenter: SWEENEY, Cathal (UCL)

Session Classification: Parallel Stream 3

Contribution ID: 76

Type: **not specified**

Reducing sensitivity to systematic uncertainties of the deep neural networks employed in the NOvA experiment

Monday 12 April 2021 14:45 (15 minutes)

Presenter: MULDER, Kevin (UCL)

Session Classification: Parallel Stream 3

Contribution ID: 77

Type: **not specified**

Measuring the CP structure of the Yukawa coupling between the Higgs boson and τ leptons

Tuesday 13 April 2021 14:45 (15 minutes)

Presenter: HASSANSHAHI, Mohammadhassan (Imperial College (GB))

Session Classification: Parallel Stream 1

Contribution ID: 78

Type: **not specified**

Neutral current quasielastic neutron tagging analysis with Super-Kamiokande-Gd

Tuesday 13 April 2021 14:45 (15 minutes)

Presenter: MEHTA, Pruthvi

Session Classification: Parallel Stream 3

Contribution ID: 79

Type: **not specified**

Time-dependent CP-violation at LHCb with $\rightarrow \pi\pi$ decays

Tuesday 13 April 2021 15:00 (15 minutes)

Presenter: MORRIS, Andrew George (University of Warwick (GB))

Session Classification: Parallel Stream 1

Contribution ID: 80

Type: **not specified**

Improving CP violation sensitivity with improved electron neutrino cross-section measurements at Hyper-Kamiokande

Tuesday 13 April 2021 15:00 (15 minutes)

Presenter: NASEBY, Charlie (Imperial College London)

Session Classification: Parallel Stream 3

Contribution ID: **81**

Type: **not specified**

Extraction of the CKM ratio $|V_{ub}|/|V_{cb}|$ through B_c^+ semileptonic decays at LHCb

Tuesday 13 April 2021 15:15 (15 minutes)

Presenter: DELANEY, Blaise Raheem (University of Cambridge (GB))

Session Classification: Parallel Stream 1

Contribution ID: 82

Type: **not specified**

Near detector constraint on beam and interaction model parameters in the T2K long-baseline neutrino oscillation analysis

Tuesday 13 April 2021 15:15 (15 minutes)

Presenter: WALSH, Joseph (Lancaster University)

Session Classification: Parallel Stream 3

Contribution ID: 83

Type: **not specified**

Measurement of charm mixing and strong-phase parameters using multi-body decays at LHCb

Tuesday 13 April 2021 15:30 (15 minutes)

Presenter: FISCHER, Kamil Leszek (University of Oxford (GB))

Session Classification: Parallel Stream 1

Contribution ID: **84**

Type: **not specified**

An Electron Neutrino Selection in the Short Baseline Near Detector (SBND)

Tuesday 13 April 2021 15:30 (15 minutes)

Presenter: TYLEY, Edward

Session Classification: Parallel Stream 3

Contribution ID: 85

Type: **not specified**

Measurement of $\Delta\Gamma_s$ using the B_s decays to the final states $J/\psi\eta'$ and $J/\psi f_0$

Tuesday 13 April 2021 15:45 (15 minutes)

Presenter: PETRUCCI, Stefano (The University of Edinburgh (GB))

Session Classification: Parallel Stream 1

Contribution ID: 86

Type: **not specified**

Using inclusive electron scattering data to improve the uncertainty on the nucleon removal energy systematic at T2K

Tuesday 13 April 2021 15:45 (15 minutes)

Presenter: MCELWEE, Jordan Michael

Session Classification: Parallel Stream 3

Contribution ID: 87

Type: **not specified**

The first angular analysis of the $B^+ \rightarrow \pi^+ \mu^+ \mu^-$ decay using Run I and Run II data at the LHCb experiment

Tuesday 13 April 2021 16:00 (15 minutes)

Presenter: CICALA, Flavia (University of Warwick (GB))

Session Classification: Parallel Stream 1

Contribution ID: 88

Type: **not specified**

An improved muon neutrino charged-current single positive pion cross section on water using michel electron reconstruction in the T2K near detector

Tuesday 13 April 2021 16:00 (15 minutes)

Presenter: JENKINS, Sam

Session Classification: Parallel Stream 3

Contribution ID: 89

Type: **not specified**

Selecting charged current ν_μ interactions with final state γ s in the T2K near detector

Thursday 15 April 2021 11:30 (15 minutes)

Presenter: DOYLE, Tristan (Lancaster University)

Session Classification: Parallel Stream 3

Contribution ID: 90

Type: **not specified**

Measurement of the Electron-Neutrino Charged-Current Inclusive Cross-Section on Argon in MicroBooNE

Thursday 15 April 2021 11:45 (15 minutes)

Presenter: MISTRY, Krishan

Session Classification: Parallel Stream 3

Contribution ID: 91

Type: **not specified**

Treatment of the $^{13}\text{C}(\alpha,n)^{16}\text{O}$ background in the SNO+ antineutrino analyses

Thursday 15 April 2021 12:00 (15 minutes)

Presenter: MILLS, Charlie (University of Sussex)

Session Classification: Parallel Stream 3

Contribution ID: 92

Type: **not specified**

Systematic Uncertainties in the NOvA Muon Neutrino Disappearance Analysis

Thursday 15 April 2021 12:15 (15 minutes)

Presenter: Ms ZHANG, Yibing (NOvA)

Session Classification: Parallel Stream 3

Contribution ID: 93

Type: **not specified**

From measurement to reinterpretation: ATLAS four-lepton invariant mass spectrum and a study of vector-like-quarks

Thursday 15 April 2021 11:30 (15 minutes)

Presenter: HUANG, Joanna (University of London (GB))

Session Classification: Parallel Stream 1

Contribution ID: 94

Type: **not specified**

High-mass Drell-Yan measurements at the ATLAS experiment and their phenomenological interpretation

Thursday 15 April 2021 11:45 (15 minutes)

Presenter: GONZALEZ LOPEZ, Ricardo (University of Liverpool (GB))

Session Classification: Parallel Stream 1

Contribution ID: 95

Type: **not specified**

Benchmarking New Hardware and Software For Machine Learning In Particle Physics

Monday 12 April 2021 13:30 (15 minutes)

Presenter: VERGANI, Stefano (Fermi National Accelerator Laboratory)

Session Classification: Parallel Stream 4

Contribution ID: 96

Type: **not specified**

Searching for long-lived heavy neutral leptons in hadronic decays with the CMS detector using a novel deep neural network-based displaced jet tagger

Thursday 15 April 2021 12:00 (15 minutes)

Presenter: DANCU, Julia-Suzana (Imperial College (GB))

Session Classification: Parallel Stream 1

Contribution ID: 97

Type: **not specified**

Observation of excited Ω_{c0} baryons in exclusive Ω_b -decays

Thursday 15 April 2021 12:15 (15 minutes)

Presenter: MITCHELL, Sara Elizabeth (The University of Edinburgh (GB))

Session Classification: Parallel Stream 1

Contribution ID: 98

Type: **not specified**

Developing a distributed water Cherenkov detector array

Monday 12 April 2021 13:45 (15 minutes)

Presenter: BASH, Simeon (UCL)

Session Classification: Parallel Stream 4

Contribution ID: 99

Type: **not specified**

An Alternative Design for Large Scale Liquid Scintillator Detectors

Monday 12 April 2021 14:00 (15 minutes)

Presenter: MORTON-BLAKE, Iwan (University of Oxford)

Session Classification: Parallel Stream 4

Contribution ID: **100**

Type: **not specified**

ARIADNE –A Liquid Argon Time Projection Chamber (LArTPC) featuring an ultra-fast optical readout

Monday 12 April 2021 14:15 (15 minutes)

Presenter: PHILIPPOU, Barney

Session Classification: Parallel Stream 4

Contribution ID: **101**

Type: **not specified**

A Simulation Framework for Spherical Proportional Counters

Monday 12 April 2021 14:30 (15 minutes)

Presenter: KNIGHTS, Patrick Ryan (University of Birmingham (GB))

Session Classification: Parallel Stream 4

Contribution ID: **102**

Type: **not specified**

Towards a Gas Filtration Setup for Ultra-Sensitive SF₆ Gas Based Rare-Event Physics Experiments

Monday 12 April 2021 14:45 (15 minutes)

Presenter: GREGORIO, Robert Renz Marcelo (University of Sheffield)

Session Classification: Parallel Stream 4

Contribution ID: **103**

Type: **not specified**

Measurement of the interference between short- and long- distance contribution in $B^+ \rightarrow K^+ \mu^+ \mu^-$ decays

Monday 12 April 2021 13:30 (15 minutes)

Presenter: Mr MADHAN MOHAN, Lakshan Ram (University of Bristol (GB))

Session Classification: Parallel Stream 2

Contribution ID: **104**

Type: **not specified**

Towards a test of the Standard Model's lepton flavour universality with the ratio of branching fractions $B(W \rightarrow \tau \nu) / B(W \rightarrow \mu \nu)$ at LHCb

Monday 12 April 2021 13:45 (15 minutes)

Presenter: HUNTER, Ross John (University of Warwick (GB))

Session Classification: Parallel Stream 2

Contribution ID: **105**

Type: **not specified**

Commissioning of the Upgraded ALICE Inner Tracking System for LHC Run 3

Tuesday 13 April 2021 14:45 (15 minutes)

Presenter: LIU, Jian (University of Liverpool (GB))

Session Classification: Parallel Stream 4

Contribution ID: **106**

Type: **not specified**

Search for charged lepton flavour violation in top quark decays

Monday 12 April 2021 14:00 (15 minutes)

Presenter: Mr STAMPEKIS, Alexios (University of Birmingham (GB))

Session Classification: Parallel Stream 2

Contribution ID: **107**

Type: **not specified**

The Commissioning of the SuperNEMO Demonstrator Module Calorimeter and an investigation into the effects of Helium Poisoning of PhotoMultiplier Tubes.

Tuesday 13 April 2021 15:00 (15 minutes)

Presenter: QUINN, William (UCL)

Session Classification: Parallel Stream 4

Contribution ID: **108**

Type: **not specified**

Measurement of RK with the full LHCb dataset

Monday 12 April 2021 14:15 (15 minutes)

Presenter: MOISE, Razvan-Daniel (Imperial College (GB))

Session Classification: Parallel Stream 2

Contribution ID: **109**

Type: **not specified**

Search for the $K^+ \rightarrow \pi^+ \nu \bar{\nu}$ decay at the NA62 Experiment at CERN

Monday 12 April 2021 14:30 (15 minutes)

Presenter: SWALLOW, Joel Christopher (University of Birmingham (GB))

Session Classification: Parallel Stream 2

Contribution ID: **110**

Type: **not specified**

Identifying Materials in Nuclear Waste Drums using Muon Scattering Tomography and Machine Learning

Tuesday 13 April 2021 15:15 (15 minutes)

Presenter: WEEKES, Michael (University of Sheffield)

Session Classification: Parallel Stream 4

Contribution ID: 111

Type: **not specified**

Contrast to Noise Ratio Method: Quantitative Assessment of Image Reconstruction Algorithms for Muon Scattering Tomography Technique.

Tuesday 13 April 2021 15:30 (15 minutes)

Presenter: F ALRHELI, Ahmad (University of Sheffield)

Session Classification: Parallel Stream 4

Contribution ID: **112**

Type: **not specified**

A Silicon Pixel system for monitoring Primary and Secondary Radiation during Hadron Therapy

Tuesday 13 April 2021 15:45 (15 minutes)

Presenter: ALSULIMANE, Mohammad E. (Liverpool)

Session Classification: Parallel Stream 4

Contribution ID: 113

Type: **not specified**

In Search of Charged Lepton Flavor Violating Decay $\mu^+ \rightarrow e^+e^+e^-$ for the Mu3e Experiment and Test-Beam Data Acquisition System for Characterization of HV-MAPS

Tuesday 13 April 2021 14:45 (15 minutes)

Presenter: WASILI, Afaf (University of Liverpool)

Session Classification: Parallel Stream 2

Contribution ID: 114

Type: **not specified**

Augmenting background hit datasets in COMET with Generative Adversarial Networks

Tuesday 13 April 2021 15:00 (15 minutes)

Presenter: DUBOUCHET, Matthias (Imperial College London)

Session Classification: Parallel Stream 2

Contribution ID: 115

Type: **not specified**

MAGIS-100: A Matter-wave Atomic Gradiometer with Sensitivities to Dark Matter

Tuesday 13 April 2021 16:00 (15 minutes)

Presenter: HINDLEY, Sam (Liverpool)

Session Classification: Parallel Stream 4

Contribution ID: **116**

Type: **not specified**

Rare Measurements and Forbidden and Exotic Searches at NA62

Tuesday 13 April 2021 15:15 (15 minutes)

Presenter: BACHE, Thomas (University of Birmingham (GB))

Session Classification: Parallel Stream 2

Contribution ID: 117

Type: **not specified**

Searches for Rare and Forbidden Exclusive Decays of the Higgs and Z Bosons to a Meson and a Photon with the ATLAS Experiment.

Tuesday 13 April 2021 15:30 (15 minutes)

Presenter: WARD, Robert James (University of Birmingham (GB))

Session Classification: Parallel Stream 2

Contribution ID: **118**

Type: **not specified**

Event reconstruction in ALICE's run 3 continuous readout environment

Thursday 15 April 2021 11:30 (15 minutes)

Presenter: LANDOU, Aimeric (University of Derby (GB))

Session Classification: Parallel Stream 4

Contribution ID: 119

Type: **not specified**

**First observation of $B \rightarrow D^*(2007)K\pi$ and
 $B_s \rightarrow D^*(2007)K\pi$ decays with fully reconstructed
 $D^*(2007)$ mesons at LHCb.**

Tuesday 13 April 2021 15:45 (15 minutes)

Presenter: BROSSA GONZALO, Arnau (University of Warwick (GB))

Session Classification: Parallel Stream 2

Contribution ID: **120**

Type: **not specified**

Track Finding in the CMS Level 1 Trigger for HL-LHC: Challenges, Design and Implementation

Thursday 15 April 2021 11:45 (15 minutes)

Presenter: MONK, David Gabriel (Imperial College (GB))

Session Classification: Parallel Stream 4

Contribution ID: **121**

Type: **not specified**

Enhancing physics reach with improved L1 triggers in Run 3

Thursday 15 April 2021 12:00 (15 minutes)

Presenter: VILLHAUER, Elena Michelle (The University of Edinburgh (GB))

Session Classification: Parallel Stream 4

Contribution ID: 122

Type: **not specified**

New Algorithms for Reconstructing Event Pairs in Gd-H₂O for Reactor Anti-neutrino Detection

Thursday 15 April 2021 12:15 (15 minutes)

Presenter: KNEALE, Elisabeth (University of Sheffield)

Session Classification: Parallel Stream 4

Contribution ID: 123

Type: **not specified**

Search for charginos and neutralinos in final states with two and three leptons and missing transverse momentum with the ATLAS experiment

Thursday 15 April 2021 11:30 (15 minutes)

Presenter: APARO, Marco (University of Sussex (GB))

Session Classification: Parallel Stream 2

Contribution ID: **124**

Type: **not specified**

Search for Supersymmetry in final states with tau leptons at the ATLAS experiment

Thursday 15 April 2021 11:45 (15 minutes)

Presenter: KOECK, Daniela Maria (University of Sussex)

Session Classification: Parallel Stream 2

Contribution ID: 125

Type: **not specified**

Results from the Search for Supersymmetry in Final States Containing Multiple b-jets with 139 fb⁻¹ with the ATLAS Detector

Thursday 15 April 2021 12:00 (15 minutes)

Presenter: HALL, Jack Joseph (University of Sheffield (GB))

Session Classification: Parallel Stream 2

Contribution ID: 126

Type: **not specified**

Measuring the electric dipole moment of the muon at the Fermilab Muon g-2 experiment

Thursday 15 April 2021 12:15 (15 minutes)

Presenter: GRANT, Sam (University College London)

Session Classification: Parallel Stream 2

Contribution ID: **127**

Type: **not specified**

Structure of ^{23}F following a one-neutron removal reaction

Monday 12 April 2021 13:30 (15 minutes)

Presenter: TETLEY, Luke (University of York)

Session Classification: Parallel Stream 8

Contribution ID: **128**

Type: **not specified**

Advances towards the measurement of γ -transitions from clustered states in $^{16}\text{O}^*$

Monday 12 April 2021 13:45 (15 minutes)

Presenter: ALCIBIA, Pedro Humberto Santa Rita (University of Birmingham)

Session Classification: Parallel Stream 8

Contribution ID: 129

Type: **not specified**

Unbound states in 16,18,20C with the R3B/LAND setup: the search for the mixed-symmetry 2+state

Monday 12 April 2021 14:00 (15 minutes)

Presenter: MURILLO MORALES, Silvia (University of York)

Session Classification: Parallel Stream 8

Contribution ID: **130**

Type: **not specified**

Identifying α -cluster states in ^{14}O using the TexAT TPC

Monday 12 April 2021 14:15 (15 minutes)

Presenter: HOLLANDS, Angus (University of Birmingham)

Session Classification: Parallel Stream 8

Contribution ID: 131

Type: **not specified**

Understanding the interplay of different reaction channels in nuclear direct reactions with weakly-bound nuclei

Monday 12 April 2021 14:30 (15 minutes)

Presenter: MOSCHINI, Laura (University of Surrey)

Session Classification: Parallel Stream 8

Contribution ID: 132

Type: **not specified**

A Review of Machine Learning for Quantum Many-Body Systems

Monday 12 April 2021 14:45 (15 minutes)

Presenter: KEEBLE, James (University of Surrey)

Session Classification: Parallel Stream 8

Contribution ID: 133

Type: **not specified**

Mass measurements of the low-lying states of ^{102}Y

Tuesday 13 April 2021 14:45 (15 minutes)

Presenter: WEAVER, Andrew (University of Brighton)

Session Classification: Parallel Stream 8

Contribution ID: 134

Type: **not specified**

Lifetime measurements of the non-yrast structure in ^{102}Mo

Tuesday 13 April 2021 15:00 (15 minutes)

Presenter: JONES, Calum (University of Brighton)

Session Classification: Parallel Stream 8

Contribution ID: 135

Type: **not specified**

Decay spectroscopy of nuclei near doubly magic ^{100}Sn with the Advanced Implantation Detector Array (AIDA) at RIKEN

Tuesday 13 April 2021 15:15 (15 minutes)

Presenter: APPLETON, Corrigan (University of Edinburgh)

Session Classification: Parallel Stream 8

Contribution ID: 136

Type: **not specified**

Collectivity beyond 78Ni: Lifetime measurements of low-lying states in neutron-rich 82Zn

Tuesday 13 April 2021 15:30 (15 minutes)

Presenter: CHEN, Zhiqiang (University of Surrey)

Session Classification: Parallel Stream 8

Contribution ID: 137

Type: **not specified**

An electrostatic ion trap for laser spectroscopy of exotic technetium isotopes

Tuesday 13 April 2021 16:00 (15 minutes)

Presenter: PITMAN-WEYMOUTH, Daniel (University of Manchester)

Session Classification: Parallel Stream 8

Contribution ID: 138

Type: **not specified**

Investigation of Isospin Symmetry Breaking Through Mirrored One-Nucleon Knockout Reactions to the $T_z = \pm 2$ $A=48$ Mirror Nuclei

Thursday 15 April 2021 11:30 (15 minutes)

Presenter: YAJZEY, Rehab (University of York)

Session Classification: Parallel Stream 8

Contribution ID: 139

Type: **not specified**

Investigation of Isospin Symmetry Violation via One- and Two- Nucleon Knockout Reactions in $T_z =$ $\pm 3/2$ nuclei

Thursday 15 April 2021 11:45 (15 minutes)

Presenter: UTHAYAKUMAAR, Sivahami (University of York)

Session Classification: Parallel Stream 8

Contribution ID: **140**

Type: **not specified**

New advancements in the shape coexistence and the onset of deformation at 98Y

Thursday 15 April 2021 12:00 (15 minutes)

Presenter: DEVLIN, Charlie Stuart (University of Liverpool (GB))

Session Classification: Parallel Stream 8

Contribution ID: 141

Type: **not specified**

The Development of Novel Pulse Shape Analysis Algorithms for the Advanced Gamma Tracking Array (AGATA)

Thursday 15 April 2021 12:15 (15 minutes)

Presenter: HOLLOWAY, Fraser (University of Liverpool)

Session Classification: Parallel Stream 8

Contribution ID: **142**

Type: **not specified**

Supernova Model Discrimination with Hyper-Kamiokande

Monday 12 April 2021 13:30 (15 minutes)

Presenter: MIGENDA, Jost (King's College London)

Session Classification: Parallel Stream 9

Contribution ID: 143

Type: **not specified**

Supernova Pointing with Multi-Detector Neutrino Light Curve Matching

Monday 12 April 2021 13:45 (15 minutes)

Presenter: WANG, Jia-Shian (University of Oxford)

Session Classification: Parallel Stream 9

Contribution ID: 144

Type: **not specified**

The Potential for Supernova Discrimination with NEO

Monday 12 April 2021 14:00 (15 minutes)

Presenter: SCHNELLBACH, Yan Jie (University of Liverpool (GB))

Session Classification: Parallel Stream 9

Contribution ID: 145

Type: **not specified**

Boulby Underground Laboratory - Delivering outreach during the pandemic

Monday 12 April 2021 14:15 (15 minutes)

Presenter: MEEHAN, Emma (STFC Boulby Lab)

Session Classification: Parallel Stream 9

Contribution ID: 146

Type: **not specified**

Subterranean Science and Ultra-Low Background Studies at Boulby Underground Laboratory

Monday 12 April 2021 14:30 (15 minutes)

Presenter: BANKS, Edward (STFC)

Session Classification: Parallel Stream 9

Contribution ID: **147**

Type: **not specified**

Cosmic ray Tomography of the Wylfa Reactor Site Using VIDARR

Monday 12 April 2021 14:45 (15 minutes)

Presenter: COLLINS, Ron (University of Liverpool)

Session Classification: Parallel Stream 9

Contribution ID: 148

Type: **not specified**

New results in the search for dark matter with the DarkSide Experiment

Tuesday 13 April 2021 14:45 (15 minutes)

Presenter: AGNES, Paolo (University of Houston (US))

Session Classification: Parallel Stream 9

Contribution ID: 149

Type: **not specified**

New Physics Searches with Low Energy Electron Recoils in the LUX ZEPLIN Experiment

Tuesday 13 April 2021 15:00 (15 minutes)

Presenter: LEASON, Elizabeth (University of Edinburgh)

Session Classification: Parallel Stream 9

Contribution ID: **150**

Type: **not specified**

Searching for Light Dark Matter with NEWS-G

Tuesday 13 April 2021 15:15 (15 minutes)

Presenter: NEEP, Tom (University of Birmingham (GB))

Session Classification: Parallel Stream 9

Contribution ID: **151**

Type: **not specified**

A search for unvirialized axions in ADMX

Tuesday 13 April 2021 15:30 (15 minutes)

Presenter: JOIS, Shriram (Royal Holloway, University of London)

Session Classification: Parallel Stream 9

Contribution ID: **152**

Type: **not specified**

Assembling the LZ Detector

Tuesday 13 April 2021 15:45 (15 minutes)

Presenter: ANGELIDES, Nicolas (University College London)

Session Classification: Parallel Stream 9

Contribution ID: 153

Type: **not specified**

Dark Noise Emission and Correlated Cross-Talk in Silicon Photomultipliers

Tuesday 13 April 2021 16:00 (15 minutes)

Presenter: MCLAUGHLIN, Joseph (Royal Holloway, University of London)

Session Classification: Parallel Stream 9

Contribution ID: **154**

Type: **not specified**

Novel improvements on the most sensitive axion detectors

Thursday 15 April 2021 11:30 (15 minutes)

Presenter: PERRY, Mitchell (University of Sheffield)

Session Classification: Parallel Stream 9

Contribution ID: 155

Type: **not specified**

LUX-ZEPLIN optical photon simulations using GPUs

Thursday 15 April 2021 11:45 (15 minutes)

Presenter: ERIKSEN, Sam (University of Bristol)

Session Classification: Parallel Stream 9

Contribution ID: **156**

Type: **not specified**

Instrumentation of the Darkside-20K Outer Detector

Thursday 15 April 2021 12:00 (15 minutes)

Presenter: HILL, Samuel (Royal Holloway, University of London)

Session Classification: Parallel Stream 9

Contribution ID: **157**

Type: **not specified**

Dark photon searches using plasma wakefield acceleration

Thursday 15 April 2021 12:15 (15 minutes)

Presenter: SCAACHI, Adam (University of London (GB))

Session Classification: Parallel Stream 9

Contribution ID: 158

Type: **not specified**

Probing the fragmentation and hadronisation processes of charm quarks using ALICE experiment at LHC

Monday 12 April 2021 13:30 (15 minutes)

Presenter: KVAPIL, Jakub (University of Birmingham (GB))

Session Classification: Parallel Stream 6

Contribution ID: **159**

Type: **not specified**

Quarkonia production in jets at LHCb

Monday 12 April 2021 13:45 (15 minutes)

Presenter: COOKE, Naomi (University of Birmingham (GB))

Session Classification: Parallel Stream 6

Contribution ID: **160**

Type: **not specified**

Measurement of Λ_c production in pp, p-Pb, and Pb-Pb collisions with the ALICE experiment at the LHC

Monday 12 April 2021 14:00 (15 minutes)

Presenter: BARTELS, Clara (University of Liverpool (GB))

Session Classification: Parallel Stream 6

Contribution ID: **161**

Type: **not specified**

Investigating strange particle production at $\sqrt{s_{NN}} = 8.16$ TeV with ALICE at the LHC

Monday 12 April 2021 14:15 (15 minutes)

Presenter: JEVONS, Oliver Thomas (University of Birmingham (GB))

Session Classification: Parallel Stream 6

Contribution ID: **162**

Type: **not specified**

Measurement of the Charge Asymmetry in Beauty Dijet Production at the LHCb Experiment

Monday 12 April 2021 14:30 (15 minutes)

Presenter: BRADLEY, Matthew (Imperial College (GB))

Session Classification: Parallel Stream 6

Contribution ID: **163**

Type: **not specified**

Probing jet quenching in heavy-ion collisions through hadron+jet measurements with the ALICE experiment

Monday 12 April 2021 14:45 (15 minutes)

Presenter: NORMAN, Jaime (University of Liverpool (GB))

Session Classification: Parallel Stream 6

Contribution ID: **164**

Type: **not specified**

Exploring Neutron stars EoS with coherent $\pi^0 \pi^0$ photoproduction at A2@MAMI

Tuesday 13 April 2021 14:45 (15 minutes)

Presenter: MOCANU, Mihai (University of York)

Session Classification: Parallel Stream 6

Contribution ID: **165**

Type: **not specified**

J/ ψ near threshold photoproduction at CLAS12

Tuesday 13 April 2021 15:00 (15 minutes)

Presenter: TYSON, Richard (University of Glasgow)

Session Classification: Parallel Stream 6

Contribution ID: **166**

Type: **not specified**

J/ψ photoproduction in Pb-Pb UPC: from $x \sim 10^{-2}$ to 10^{-5}

Tuesday 13 April 2021 15:15 (15 minutes)

Presenter: RAGONI, Simone (University of Birmingham (GB))

Session Classification: Parallel Stream 6

Contribution ID: **167**

Type: **not specified**

Analysis of $\gamma p \rightarrow \pi^+\pi^- p$ at GlueX

Tuesday 13 April 2021 15:30 (15 minutes)

Presenter: FITCHES, James (University of Glasgow)

Session Classification: Parallel Stream 6

Contribution ID: **168**

Type: **not specified**

Probing the internal structure of the neutron: Hard Exclusive π^0 -Production off neutrons using a deuteron target at CLAS12

Tuesday 13 April 2021 15:45 (15 minutes)

Presenter: NAIDOO, Paul (University of Glasgow)

Session Classification: Parallel Stream 6

Contribution ID: **169**

Type: **not specified**

Towards the Discovery of First Strange Hexaquark with CLAS12

Tuesday 13 April 2021 16:00 (15 minutes)

Presenter: CLASH, Geraint (University of York)

Session Classification: Parallel Stream 6

Contribution ID: 170

Type: **not specified**

ADNIF@Bham —an Accelerator-Driven Neutron Irradiation Facility

Thursday 15 April 2021 11:30 (15 minutes)

Presenter: WHELDON, Carl (University of Birmingham)

Session Classification: Parallel Stream 6

Contribution ID: 171

Type: **not specified**

Electrons for Neutrinos at Jefferson Lab

Thursday 15 April 2021 11:45 (15 minutes)

Presenter: FEGAN, Stuart (University of York)

Session Classification: Parallel Stream 6

Contribution ID: 172

Type: **not specified**

The MARA Low-Energy Branch: The first tests and next steps

Thursday 15 April 2021 12:00 (15 minutes)

Presenter: PAPADAKIS, Filippas (STFC Daresbury Laboratory (GB))

Session Classification: Parallel Stream 6

Contribution ID: 173

Type: **not specified**

Development of an upgraded National Nuclear Array (NaNA) at the National Physical Laboratory

Thursday 15 April 2021 12:15 (15 minutes)

Presenter: COLLINS, Sean (NPL)

Session Classification: Parallel Stream 6

Contribution ID: 174

Type: **not specified**

☒-delayed neutron emission from r-process nuclei along the N=82 shell closure

Monday 12 April 2021 13:30 (15 minutes)

Presenter: HALL, Oscar (University of Edinburgh)

Session Classification: Parallel Stream 7

Contribution ID: 175

Type: **not specified**

Excited States in the Rare-Earth Nucleus ^{129}Pr

Monday 12 April 2021 13:45 (15 minutes)

Presenter: WARING, Lorna (University of Liverpool)

Session Classification: Parallel Stream 7

Contribution ID: 176

Type: **not specified**

Structure of neutron rich nuclei in the ^{132}Sn region

Monday 12 April 2021 14:00 (15 minutes)

Presenter: PARRY, Tom (University of Surrey)

Session Classification: Parallel Stream 7

Contribution ID: 177

Type: **not specified**

Identification of sub- μ s isomeric states in the odd-odd nucleus ^{178}Au .

Monday 12 April 2021 14:15 (15 minutes)

Presenter: GILLESPIE, Stephen (TRIUMF)

Session Classification: Parallel Stream 7

Contribution ID: **178**

Type: **not specified**

Calculated octupole spectra near Pb-208 with a time-dependent method

Monday 12 April 2021 14:30 (15 minutes)

Presenter: STEVENSON, Paul (University of Surrey)

Session Classification: Parallel Stream 7

Contribution ID: 179

Type: **not specified**

Developing a charge plunger method for lifetime measurements in the heavy elements

Monday 12 April 2021 14:45 (15 minutes)

Presenter: HEERY, Jacob (University of Liverpool)

Session Classification: Parallel Stream 7

Contribution ID: **180**

Type: **not specified**

Nucleosynthesis inside common envelope accretion

Tuesday 13 April 2021 14:45 (15 minutes)

Presenter: HALL-SMITH, Alexander (University of York)

Session Classification: Parallel Stream 7

Contribution ID: **181**

Type: **not specified**

The $^{22}\text{Ne}(\alpha, n)^{25}\text{Mg}$ reaction rate and its key role in low metallicity AGB stellar nucleosynthesis

Tuesday 13 April 2021 15:00 (15 minutes)

Presenter: BATTINO, Umberto (University of Edinburgh)

Session Classification: Parallel Stream 7

Contribution ID: **182**

Type: **not specified**

Investigating The Astrophysical s-Process with DRAGON: Direct Measurement of the $^{22}\text{Ne}(\alpha,\gamma)^{26}\text{Mg}$ Reaction

Tuesday 13 April 2021 15:15 (15 minutes)

Presenter: JAZRAWI, Shaheen (University of Surrey/National Physical Laboratory)

Session Classification: Parallel Stream 7

Contribution ID: **183**

Type: **not specified**

^{21}Ne and the Lighter Heavy Elements

Tuesday 13 April 2021 15:30 (15 minutes)

Presenter: ANGUS, Cameron (University of York)

Session Classification: Parallel Stream 7

Contribution ID: **184**

Type: **not specified**

New measurement of oxygen-15 alpha capture for neutron stars in binary systems through radioactive ion beam alpha transfer

Tuesday 13 April 2021 15:45 (15 minutes)

Presenter: SANCHEZ ROJO, Jennifer (University of York)

Session Classification: Parallel Stream 7

Contribution ID: **185**

Type: **not specified**

How good a poison is 16O?

Tuesday 13 April 2021 16:00 (15 minutes)

Presenter: ADSLEY, Philip (Wits/iThemba LABS)

Session Classification: Parallel Stream 7

Contribution ID: **186**

Type: **not specified**

Mass measurement and energy level analysis of 190-Re using the Q3D magnetic spectrograph

Thursday 15 April 2021 11:30 (15 minutes)

Presenter: GRIFFITHS, Mark (University of Birmingham)

Session Classification: Parallel Stream 7

Contribution ID: **187**

Type: **not specified**

The 12C+12C fusion cross-section at sub-coulomb barrier energies

Thursday 15 April 2021 11:45 (15 minutes)

Presenter: VEGA ROMERO, Jose Gustavo (University of York)

Session Classification: Parallel Stream 7

Contribution ID: **188**

Type: **not specified**

Developing an Active-Target detector for studying nuclear reactions of astrophysical significance

Thursday 15 April 2021 12:00 (15 minutes)

Presenter: CHAKRABORTY, Soham (University of York)

Session Classification: Parallel Stream 7

Contribution ID: **189**

Type: **not specified**

The Impact of Nuclear Physics Uncertainties on Nucleosynthesis in the First Stars

Thursday 15 April 2021 12:15 (15 minutes)

Presenter: LLOYD, Samuel (University of Edinburgh)

Session Classification: Parallel Stream 7

Contribution ID: **190**

Type: **not specified**

Pub quiz

Wednesday 14 April 2021 18:30 (2 hours)

Pub quiz - you need to bring your own beverages and snacks.

Presenters: MARTYNIUK, Alex (UCL); WYNNE, Benjamin Michael (The University of Edinburgh (GB)); LIU, Xin Ran (University College London); GAO, Yanyan (University of Edinburgh (GB))

Session Classification: Social programme