### 54th Winter Nuclear Particle Physics Conference (WNPPC2017)

### **Report of Contributions**

Contribution ID: 0 Type: not specified

### **Opening remarks**

**Presenter:** Prof. LEFEBVRE, Michel (University of Victora)

Opening remarks

Contribution ID: 1 Type: not specified

### Opening remarks

Thursday, 16 February 2017 19:00 (15 minutes)

**Presenter:** Prof. LEFEBVRE, Michel (University of Victora)

Contribution ID: 2 Type: not specified

#### **Inner Tracker Detector Advances**

Thursday, 16 February 2017 19:15 (30 minutes)

**Presenter:** Dr HESSEY, Nigel P.

Contribution ID: 3 Type: not specified

### Proposed CMOS-based Sensors for the ATLAS Detector: CHESS-2

Thursday, 16 February 2017 19:45 (15 minutes)

**Presenter:** NEWHOUSE, Robin

Contribution ID: 4 Type: **not specified** 

# Investigations of Calorimeter Clustering in ATLAS Using Machine Learning

Thursday, 16 February 2017 20:00 (15 minutes)

**Presenter:** NIEDERMAYER, Graeme

Contribution ID: 5 Type: **not specified** 

#### Neutral Hadron Particle Identification using CsI(TI) Scintillation Pulse Shape Analysis

Thursday, 16 February 2017 20:15 (15 minutes)

Presenter: LONGO, Savino

Contribution ID: 6 Type: **not specified** 

### BEAST-II: Measurement of Machine-Induced Backgrounds during Commissioning of SuperKEKB

Thursday, 16 February 2017 20:30 (15 minutes)

Presenter: BEAULIEU, Alexandre

Contribution ID: 7 Type: **not specified** 

## Accelerator Physics Developments for Rare Isotope Facilities

Friday, 17 February 2017 08:30 (30 minutes)

**Presenter:** Dr KESTER, Oliver (TRIUMF)

Contribution ID: 8 Type: not specified

#### Design and Simulation of Beam-Background Monitors in the Vicinity of the Electromagnetic Calorimeter for the Belle II Experiment

Friday, 17 February 2017 09:00 (15 minutes)

Presenter: FODOR, Andrea

Contribution ID: 9 Type: not specified

# Calculation of Isotope Rates for Radioactive Beam Production

Friday, 17 February 2017 09:15 (15 minutes)

**Presenter:** GARCIA, Fatima H.

Contribution ID: 10 Type: not specified

### Simulation of Optical Pumping in TRIUMF's Collinear Laser Spectroscopy Experiment

Friday, 17 February 2017 09:30 (15 minutes)

Presenter: REFOUR TANNENBAUM, Julien

Contribution ID: 11 Type: not specified

### Simulating the DESCANT Neutron Detection Array with the Geant4 Toolkit

Friday, 17 February 2017 09:45 (15 minutes)

Presenter: TURKO, Joseph

Contribution ID: 12 Type: not specified

#### Ion Trapping at Rare-Isotope-Beam Facilities

Friday, 17 February 2017 10:15 (30 minutes)

Presenter: Dr KWIATKOWSKI, Anna

Contribution ID: 13 Type: not specified

#### Towards N = 82 r-Process Waiting Point: Precision Atomic Mass Measurements of 125-127Cd

Friday, 17 February 2017 10:45 (15 minutes)

Presenter: LEISTENSCHNEIDER, Erich

Contribution ID: 14 Type: not specified

#### Study of 22 Ne and 28 Mg Excited States using Fusion-Evaporation and Doppler Shift Measurements

Friday, 17 February 2017 11:00 (15 minutes)

**Presenter:** WILLIAMS, Jonathan

Contribution ID: 15 Type: not specified

#### **Single Particle Structure of Exotic Strontium Isotopes**

Friday, 17 February 2017 11:15 (15 minutes)

Presenter: CRUZ, Steffen

Contribution ID: 16 Type: not specified

## **Neutron Activation Analysis via Nuclear Decay Kinetics using Gamma-Ray Spectroscopy at SFU**

Friday, 17 February 2017 11:30 (15 minutes)

**Presenter:** DOMINGO, Thomas

Contribution ID: 17 Type: not specified

# Dark Matter Searches at SNOLAB: looking for WIMPs, either heavy or light

Friday, 17 February 2017 19:00 (30 minutes)

**Presenter:** Dr GOREL, Pierre

Contribution ID: 18 Type: not specified

#### Dark Matter Direct Detection with NEWS-G: Analysis and Results

Friday, 17 February 2017 19:30 (15 minutes)

**Presenter:** VAZQUEZ DE SOLA FERNANDEZ, Francisco

Contribution ID: 19 Type: not specified

#### Search for Dark Matter with leptonically-decaying Z Bosons and Missing Transverse Energy in the ATLAS Detector at the LHC

Friday, 17 February 2017 19:45 (15 minutes)

Presenter: ELLIOT, Alison

Contribution ID: 20 Type: not specified

#### A likelihood Ratio Algorithm to remove localized Alpha Particle Backgrounds in the DEAP-3600 Detector

Friday, 17 February 2017 20:00 (15 minutes)

**Presenter:** MIELNICHUK, Courtney

Contribution ID: 21 Type: not specified

# Photo-Electron Pulse Finding and Pile-up Detection for the DEAP Experiment

Friday, 17 February 2017 20:15 (15 minutes)

**Presenter:** MCELROY, Thomas

Contribution ID: 22 Type: not specified

#### Barium-Ion Tagging for 136Xe Double-Beta Decay Studies with nEXO

Friday, 17 February 2017 20:45 (30 minutes)

**Presenter:** Prof. BRUNNER, Thomas

Contribution ID: 23 Type: not specified

#### The 16N Source for the Calibration of the SNO+ Experiment

Friday, 17 February 2017 21:15 (15 minutes)

Presenter: HU, Jie

Contribution ID: 24 Type: not specified

#### **Detection of Antineutrinos Using the SNO+ Detector**

Friday, 17 February 2017 21:30 (15 minutes)

**Presenter:** MEKARSKI, Pawel

Contribution ID: 25 Type: not specified

### Geochemical Measurement of the Half-Life of the Double- Beta Decay of 96Zr

Friday, 17 February 2017 21:45 (15 minutes)

**Presenter:** MAYER, Adam J.

Contribution ID: 26 Type: not specified

### Introduction to the Ultracold Neutron Facility at TRIUMF

Saturday, 18 February 2017 08:30 (30 minutes)

**Presenter:** Dr FRANKE, Beatrice

Contribution ID: 27 Type: not specified

### EDM Monte Carlo Simulations for the UCN Experiment at TRIUMF

Saturday, 18 February 2017 09:00 (15 minutes)

**Presenter:** CHAHAL, Sanmeet

Contribution ID: 28 Type: not specified

#### Compensation of Magnetic Fields in the TRIUMF nEDM Experiment

Saturday, 18 February 2017 09:15 (15 minutes)

Presenter: AHMED, Shomi

Contribution ID: 29 Type: not specified

#### Observation of Atomic Transition in Antihydrogen

Saturday, 18 February 2017 09:30 (15 minutes)

**Presenter:** EVANS, Andrew

Contribution ID: 30 Type: not specified

# Identification of the 2+ms mixed-symmetry State in 52Ti using Alpha Transfer Reaction

Saturday, 18 February 2017 09:45 (15 minutes)

**Presenter:** Dr ALI, Fuad A.

Contribution ID: 31 Type: not specified

# Connecting Nuclear Astrophysics to Cosmological Structure Formation

Saturday, 18 February 2017 10:15 (30 minutes)

Presenter: Dr CÔTÉ, Benoit

Contribution ID: 32 Type: not specified

#### The 22Ne(p,y)23Na Reaction and the Origin of 23Na

Saturday, 18 February 2017 10:45 (15 minutes)

Presenter: Dr LENNARZ, Annika

Contribution ID: 33 Type: not specified

# Experimental Results of $\beta$ -delayed Neutron Branching Ratios for heavy Species

Saturday, 18 February 2017 11:00 (15 minutes)

**Presenter:** Dr CABALLERO-FOLCH, Roger

Contribution ID: 34 Type: not specified

### A Study on Low Spin States in 154Gd using (p, p') Reaction

Saturday, 18 February 2017 11:15 (15 minutes)

**Presenter:** BIDAMAN, Harris

Contribution ID: 35 Type: not specified

## Investigation of excited 0+ States populated via the Er-162 two-Neutron Transfer Reaction

Saturday, 18 February 2017 11:30 (15 minutes)

Presenter: BURBADGE, Christina

Contribution ID: 36 Type: not specified

### The Nuclear Delta Force and The Two-Particle-Rotor Model

Saturday, 18 February 2017 11:45 (15 minutes)

Presenter: VERMA, Anish

Contribution ID: 37 Type: not specified

### **Exploring the Higgs Boson with ATLAS Data**

Saturday, 18 February 2017 19:00 (30 minutes)

Presenter: Dr GILLBERG, Dag

Contribution ID: 38 Type: not specified

### **Quartic Gauge Boson Coupling Results from the LHC**

Saturday, 18 February 2017 19:30 (15 minutes)

**Presenter:** Dr ANELLI, Christopher

Contribution ID: 39 Type: not specified

# Measurement of Z Bosons produced in association with Jets via Vector Boson Fusion at 13 TeV with the ATLAS Detector

Saturday, 18 February 2017 19:45 (15 minutes)

**Presenter:** WEBER, Stephen

Contribution ID: 40

Type: not specified

#### Hunting for "Bumps" in the Dilepton Invariant Mass Spectrum using BUMPHUNTER at the ATLAS Detector

Saturday, 18 February 2017 20:00 (15 minutes)

**Presenter:** KHODA, Elham E.

Contribution ID: 41 Type: not specified

## The Hunt for the Z' Boson in ATLAS: a Statistical Perspective

Saturday, 18 February 2017 20:15 (15 minutes)

**Presenter:** DREYER, Etienne

Contribution ID: 42 Type: not specified

# Spectrometer and Detector Simulations for the MOLLER Experiment

Saturday, 18 February 2017 20:45 (15 minutes)

Presenter: RAHMAN, Sakib

Contribution ID: 43 Type: not specified

#### Electron Detection for the Jefferson Lab Hall A Compton Polarimeter

Saturday, 18 February 2017 21:00 (15 minutes)

Presenter: SPIES, Ryan

Contribution ID: 44

Type: not specified

# Analysis of the $\eta(548)\to\pi^+\pi^-\pi^0$ and $\eta'(958)\to\pi^+\pi^-\eta$ Channels using a 8-9 GeV tagged Photon Beam for the GlueX Experiment

Saturday, 18 February 2017 21:15 (15 minutes)

Presenter: BEATTIE, Tegan

Contribution ID: 45 Type: not specified

# Preliminary Survey of the Photoproduction of $\pi$ + + $\pi$ - + 4 $\gamma$ Final State in GlueX Experiment

Saturday, 18 February 2017 21:30 (15 minutes)

**Presenter:** FODA, Ahmed M.

Contribution ID: 46

Type: not specified

#### Spin Polarizability of a Proton via Measurement of Nuclear Structure Observable with Polarized Target and Polarized Beam at MAMI

Saturday, 18 February 2017 21:45 (15 minutes)

**Presenter:** PAUDYAL, Dilli R.

Contribution ID: 47 Type: **not specified** 

### **Detailed Spectroscopy of 132Sn with GRIFFIN**

Sunday, 19 February 2017 08:30 (15 minutes)

Presenter: Dr WHITMORE, Kenneth

Contribution ID: 48 Type: not specified

### **Angular Correlation Measurements With GRIFFIN**

Sunday, 19 February 2017 08:45 (15 minutes)

**Presenter:** MACLEAN, Andrew D.

Contribution ID: 49 Type: not specified

## Progress towards measuring Parity Non Conservation in Francium

Sunday, 19 February 2017 09:00 (15 minutes)

**Presenter:** Dr KALITA, Mukut R.

Contribution ID: 50 Type: not specified

### A Silicon Tracker for ISAC-II and the Future ARIEL Facility

Sunday, 19 February 2017 09:15 (15 minutes)

**Presenter:** Dr MUECHER, Dennis

Contribution ID: 51 Type: not specified

### Ground State Spin of 101Sn and the Role of the Tensor Force in exotic Nuclei

Sunday, 19 February 2017 09:30 (15 minutes)

Presenter: PARK, Joochun

Contribution ID: **52** Type: **not specified** 

# Coulomb Artifacts and Bottomonium Hyperfine Splitting in Lattice NRQCD

Sunday, 19 February 2017 09:45 (15 minutes)

Presenter: RAYYAN, Ahmed

Contribution ID: 53 Type: not specified

### Reaction Spectroscopy unveils new Features of Rare Isotopes

Sunday, 19 February 2017 10:30 (30 minutes)

Presenter: Prof. KANUNGO, Rituparna

Contribution ID: 54 Type: **not specified** 

#### A new Determination of Vus

Sunday, 19 February 2017 11:00 (15 minutes)

**Presenter:** Prof. MALTMAN, Kim

Contribution ID: 55 Type: not specified

### **Closing remarks**

Sunday, 19 February 2017 11:30 (15 minutes)

**Presenter:** Prof. LEFEBVRE, Michel (University of Victora)