

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

**Report of Contributions**

Contribution ID: 0

Type: **not specified**

## Opening remarks

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

Contribution ID: 1

Type: **not specified**

## Opening remarks

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

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

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(Tl) 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 $^{136}\text{Xe}$ 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 $^{96}\text{Zr}$**

*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 $^{52}\text{Ti}$ 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 $^{22}\text{Ne}(p,\gamma)^{23}\text{Na}$ Reaction and the Origin of $^{23}\text{Na}$**

*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 $^{154}\text{Gd}$ 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 $\eta(548) \rightarrow \pi^+ \pi^- \pi^0$ and $\eta'(958) \rightarrow \pi^+ \pi^- \eta$ 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 $^{132}\text{Sn}$ 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 $^{101}\text{Sn}$ 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 Victoria)