# NuInt 17: 11th International Workshop on Neutrino-Nucleus Scattering in the Few-GeV Region



# **Report of Contributions**

Welcome

Contribution ID: 67

Type: not specified

#### Welcome

Sunday, 25 June 2017 09:00 (15 minutes)

**Presenter:** Prof. JAYAWARDHANA, Ray (York University)

Session Classification: Welcome and Introductory Talks

Welcome from Organizers

Contribution ID: 68

Type: not specified

## Welcome from Organizers

Sunday, 25 June 2017 09:15 (15 minutes)

**Presenters:** Mr TANAKA, hirohisa (University of Toronto/IPP/TRIUMF); Prof. BHADRA, sampa (York University)

Session Classification: Welcome and Introductory Talks

NuSTEC status

Contribution ID: 69

Type: not specified

#### **NuSTEC** status

Sunday, 25 June 2017 09:30 (20 minutes)

**Presenter:** MORFIN, Jorge (Fermilab)

Session Classification: Welcome and Introductory Talks

Highlights from the NuSTEC New...

Contribution ID: 70

Type: not specified

## **Highlights from the NuSTEC Newsletter**

Sunday, 25 June 2017 09:50 (40 minutes)

**Presenter:** Dr KATORI, Teppei (Queen Mary University of London) **Session Classification:** Welcome and Introductory Talks

Neutrino interactions outside the o ...

Contribution ID: 71

Type: not specified

# Neutrino interactions outside the oscillation program

Sunday, 25 June 2017 10:55 (40 minutes)

**Presenter:** POSPELOV, maxim

Session Classification: Theory of Neutrino-Nucleus Scattering

**Elementary Amplitudes** 

Contribution ID: 72

Type: not specified

# **Elementary Amplitudes**

Sunday, 25 June 2017 16:15 (40 minutes)

Presenter: SHANAHAN, Phiala

Session Classification: Theory of Neutrino-Nucleus Scattering

Nuclear cross sections in the quasi-...

Contribution ID: 73

Type: not specified

#### Nuclear cross sections in the quasi-elastic peak

Sunday, 25 June 2017 11:35 (40 minutes)

**Presenters:** Dr CARLSON, Joe; Mr CARLSON, Joseph (LANL) **Session Classification:** Theory of Neutrino-Nucleus Scattering

Impact on Oscillation Analyses

Contribution ID: 74

Type: not specified

## Impact on Oscillation Analyses

**Presenter:** HUBER, Patrick (Virgina Tech)

NOvA: Impact of cross section unc ...

Contribution ID: 75

Type: not specified

# NOvA: Impact of cross section uncertainties in the oscillation analysis

Sunday, 25 June 2017 13:40 (35 minutes)

**Presenter:** WOLCOTT, Jeremy (Tufts University)

T2K: Impact of Cross Section unce...

Contribution ID: 76

Type: not specified

# T2K: Impact of Cross Section uncertainties on the oscillation anlaysis

Sunday, 25 June 2017 14:15 (35 minutes)

Presenter: DENNIS, Steve (University of Liverpool)

Systematics related to q0-q3 deter ...

Contribution ID: 77

Type: not specified

# Systematics related to q0-q3 determination

Sunday, 25 June 2017 15:45 (30 minutes)

**Presenter:** GRAN, Rik (University)

nue/numu cross section difference...

Contribution ID: 78

Type: not specified

#### nue/numu cross section differences and their impact on oscillation analyses

Sunday, 25 June 2017 14:50 (35 minutes)

**Presenter:** MCFARLAND, Kevin

DIS Ratio measurement from MIN ...

Contribution ID: 79

Type: not specified

#### **DIS Ratio measurement from MINERvA**

Monday, 26 June 2017 09:00 (20 minutes)

Presenter: Ms NORRICK, Anne (The College of William and Mary)Session Classification: Shallow Inelastic, Deep Inelastic and Inclusive Scattering

nubar/nu Ratio measurement at M...

Contribution ID: 80

Type: not specified

#### nubar/nu Ratio measurement at MINERvA

Monday, 26 June 2017 09:20 (20 minutes)

**Primary author:** RIMAL, Dipak (University of Florida)

Presenters: RIMAL, Dipak (University of Florida); Prof. NELSON, Jeff (William & amp; Mary)

MicroBooNE Overview

Contribution ID: 81

Type: not specified

### **MicroBooNE Overview**

Monday, 26 June 2017 09:40 (20 minutes)

**Presenter:** Dr FURMANSKI, Andrew (University of Manchester)

Muon neutrino inclusive CC cross...

Contribution ID: 82

Type: not specified

#### Muon neutrino inclusive CC cross section measurement on carbon and carbon/oxygen ratio at T2K

Monday, 26 June 2017 10:00 (20 minutes)

Presenter: GARCIA, Alfonso (IFAE Barcelona)

Current and future measurements ...

Contribution ID: 83

Type: not specified

#### Current and future measurements with electron neutrinos and electron anti-neutrinos in the T2K off-axis near detector

Monday, 26 June 2017 10:20 (20 minutes)

Presenter: KING, Sophie (Queen Mary University London)

Inclusive numu and nue CC measu ...

Contribution ID: 84

Type: not specified

#### Inclusive numu and nue CC measurements at NOvA

Monday, 26 June 2017 11:00 (25 minutes)

**Presenter:** Dr PALEY, Jonathan (Fermilab)

Global analysis from DIS to the ...

Contribution ID: 85

Type: not specified

#### Global analysis from DIS to the small-Q2 region

Monday, 26 June 2017 11:25 (20 minutes)

Presenter: Prof. KUMANO, Shunzo (KEK)

Nuclear medium effects on structu...

Contribution ID: 86

Type: not specified

#### Nuclear medium effects on structure functions

Thursday, 29 June 2017 09:00 (20 minutes)

Presenter: HAIDER, Huma (Aligarh Muslim University)

Global analysis of nuclear PDFs

Contribution ID: 87

Type: not specified

# **Global analysis of nuclear PDFs**

Presenter: KEPPEL, Cynthia (JLAB, Hampton University)

Hadron production overview

Contribution ID: 88

Type: not specified

#### Hadron production overview

Monday, 26 June 2017 13:30 (30 minutes)

Presenter: Prof. MARINO, Alysia (University of Colorado, Boulder)Session Classification: Neutrino Flux Calculations and Measurements

The DUNE Flux Prediction

Contribution ID: 89

Type: not specified

### The DUNE Flux Prediction

Monday, 26 June 2017 14:00 (20 minutes)

Presenter: Mr BASHYAL, Amit (Oregon State University)Session Classification: Neutrino Flux Calculations and Measurements

The NuMI Flux Prediction

Contribution ID: 90

Type: not specified

## The NuMI Flux Prediction

Monday, 26 June 2017 14:20 (25 minutes)

**Presenter:** Dr ALIAGA SOPLIN, Leonidas (Fermilab)

Session Classification: Neutrino Flux Calculations and Measurements

The T2K Flux Prediction

Contribution ID: 91

Type: not specified

## **The T2K Flux Prediction**

Monday, 26 June 2017 14:45 (25 minutes)

Presenter: KOWALIK, Katarzyna (Warsaw)

Session Classification: Neutrino Flux Calculations and Measurements

Future Hadron Production Measur ...

Contribution ID: 92

Type: not specified

#### **Future Hadron Production Measurements**

Monday, 26 June 2017 15:30 (20 minutes)

**Presenter:** Dr HARTZ, Mark (Kavli IPMU (WPI), University of Tokyo/TRIUMF) **Session Classification:** Neutrino Flux Calculations and Measurements

Enubet

Contribution ID: 93

Type: not specified

#### Enubet

Monday, 26 June 2017 15:50 (20 minutes)

Presenter: LONGHIN, Andrea (INFN)

Session Classification: Neutrino Flux Calculations and Measurements

Electron scattering with ab initio a ...

Contribution ID: 94

Type: not specified

#### Electron scattering with ab initio approaches

Monday, 26 June 2017 16:10 (25 minutes)

**Presenter:** Dr LOVATO, Alessandro (Argonne National Laboratory)**Session Classification:** Electron Scattering and Other Non-neutrino Measurements

Electron scattering with the Super...

Contribution ID: 95

Type: not specified

## **Electron scattering with the Super Scaling Approach**

Monday, 26 June 2017 16:35 (25 minutes)

Presenter: Prof. CABALLERO, Juan Antonio (University of Seville)Session Classification: Electron Scattering and Other Non-neutrino Measurements

Pion Photoproduction

Contribution ID: 96

Type: not specified

## **Pion Photoproduction**

Tuesday, 27 June 2017 10:10 (25 minutes)

Presenter: HILLER BLIN, Astrid Nathalie (IFIC)

Short Range Correlations in Heavy ...

Contribution ID: 97

Type: not specified

## Short Range Correlations in Heavy Nuclei

*Tuesday, 27 June 2017 10:55 (25 minutes)* 

**Presenter:** HEN, Or (MIT)

Determination of the axial mass p ...

Contribution ID: 98

Type: not specified

# Determination of the axial mass parameter and proton charge radius

*Tuesday, 27 June 2017 11:20 (25 minutes)* 

**Consider for Talk** 

Yes

Presenter: PAZ, Gil (Wayne State University)

R ratio measurements from JLAB

Contribution ID: 99

Type: not specified

#### **R** ratio measurements from JLAB

Tuesday, 27 June 2017 11:45 (25 minutes)

We present results on the nuclear dependence ratio of R, the longitudinal and transverse structure function ratio. We present results on the difference between R\_A(nucleus) and R\_D(deuterium) for Carbon (R\_C- R\_D), Aluminum (R\_AL -R\_D), Iron (R\_Fe-R\_D) and Copper (R\_Cu-R\_C) for Q^2=2, 3, and 4 GeV^2 from electron scattering experiments at Jefferson Lab.

#### **Consider for Talk**

Yes

Primary author: BODEK, Arie (University of Rochester)

Presenter: BODEK, Arie (University of Rochester)

Session Classification: Electron Scattering and Other Non-neutrino Measurements

Measurement of the Spectral Func ...

Contribution ID: 100

Type: not specified

#### **Measurement of the Spectral Function of 40Ar**

Sunday, 25 June 2017 16:55 (25 minutes)

Presenter: MARIANI, Camillo (Virginia Tech)

Pion scattering and secondary inte ...

Contribution ID: 101

Type: not specified

#### Pion scattering and secondary interactions

*Tuesday, 27 June 2017 09:25 (25 minutes)* 

Presenter: PINZON GUERRA, Elder

Pion scattering at LAriAT

Contribution ID: 102

Type: not specified

## Pion scattering at LAriAT

Tuesday, 27 June 2017 09:50 (20 minutes)

**Presenters:** Prof. ASAADI, Jonathan (University of Texas Arlington); ASAADI, Jonathan (University of Texas at Arlington)

Session Classification: Electron Scattering and Other Non-neutrino Measurements

Pion production at the nucleon lev...

Contribution ID: 103

Type: not specified

## Pion production at the nucleon level: resonances and continuum

Tuesday, 27 June 2017 13:30 (20 minutes)

**Presenter:** KABIRNEZHAD, monireh (NCBJ)

Pion Production at the Nucleon Level

Contribution ID: 104

Type: not specified

## **Pion Production at the Nucleon Level**

*Tuesday, 27 June 2017 13:50 (20 minutes)* 

**Presenter:** Dr HERNANDEZ, Eliecer (Universidad de Salamanca)

Pion production at the nucleon lev...

Contribution ID: 105

Type: not specified

# Pion production at the nucleon level: from low to high W

Tuesday, 27 June 2017 14:10 (20 minutes)

Presenter: Dr GONZALEZ JIMENEZ, Raul (Ghent University)

Nuclear Effects in Pion Production ...

Contribution ID: 106

Type: not specified

#### Nuclear Effects in Pion Production/Resonance Region

*Tuesday, 27 June 2017 14:30 (25 minutes)* 

Presenter: NIEVES PAMPLONA, Juan Miguel (IFIC)

Analysis of bubble chamber data o ...

Contribution ID: 107

Type: not specified

# Analysis of bubble chamber data on neutrino-induced pion production off the deuteron

*Tuesday, 27 June 2017 14:55 (20 minutes)* 

Presenter: Dr NAKAMURA, Satoshi (Osaka University)

Pion production measurements at ...

Contribution ID: 108

Type: not specified

### Pion production measurements at T2K

*Tuesday, 27 June 2017 15:15 (20 minutes)* 

**Presenter:** Dr BATKIEWICZ, Marcela (Institute of Nuclear Physics PAN)**Session Classification:** Neutrino Pion Production and Other Inelastic Interactions

Pion production measurements at ...

Contribution ID: 109

Type: not specified

### Pion production measurements at MINERvA

*Tuesday, 27 June 2017 15:55 (20 minutes)* 

Presenter: RAMIREZ DELGADO, Manuel Alejandro (Universidad de Guanajuato)Session Classification: Neutrino Pion Production and Other Inelastic Interactions

Pion production measurements at ...

Contribution ID: 110

Type: not specified

### Pion production measurements at NOvA

*Tuesday, 27 June 2017 16:15 (20 minutes)* 

Presenter: DUYANG, Hongyue (University of South Carolina)Session Classification: Neutrino Pion Production and Other Inelastic Interactions

ArgoNeuT Charged single pion pr ...

Contribution ID: 111

Type: not specified

## ArgoNeuT Charged single pion production meusurement

*Tuesday, 27 June 2017 16:35 (20 minutes)* 

**Presenter:** YANG, Tingjun (FNAL)

Neutrino event generator status

Contribution ID: 112

Type: not specified

## Neutrino event generator status

Wednesday, 28 June 2017 09:00 (25 minutes)

Presenter:DYTMAN, Steve (University of Pittsburgh)Session Classification:Neutrino Interaction Generators

Status of the NuWRO event gener ...

Contribution ID: 113

Type: not specified

## Status of the NuWRO event generator

Wednesday, 28 June 2017 09:25 (25 minutes)

**Presenter:** NIEWCZAS, Kajetan (Wroclaw/Ghent University) **Session Classification:** Neutrino Interaction Generators

Status of Genie event generator

Contribution ID: 114

Type: not specified

## Status of Genie event generator

Wednesday, 28 June 2017 09:50 (25 minutes)

**Presenter:** WOLCOTT, Jeremy (Tufts university)

Session Classification: Neutrino Interaction Generators

Status of Neut event generator

Contribution ID: 115

Type: not specified

## Status of Neut event generator

Wednesday, 28 June 2017 10:45 (25 minutes)

**Presenter:** Dr HAYATO, Yoshinari (Kamioka obs., ICRR, Univ. of Tokyo) **Session Classification:** Neutrino Interaction Generators

Status of GiBUU

Contribution ID: 116

Type: not specified

## Status of GiBUU

Wednesday, 28 June 2017 11:10 (25 minutes)

**Presenter:** Prof. MOSEL, Ulrich (University of Giessen)

Session Classification: Neutrino Interaction Generators

NUISANCE

Contribution ID: 117

Type: not specified

#### NUISANCE

Wednesday, 28 June 2017 11:35 (25 minutes)

**Presenter:** Mr WRET, Clarence (Imperial College London) **Session Classification:** Neutrino Interaction Generators

PYTHIA

Contribution ID: 118

Type: not specified

### **PYTHIA**

Neutrino charged current pionless ...

Contribution ID: 119

Type: not specified

#### Neutrino charged current pionless cross section measurements from T2K

Thursday, 29 June 2017 09:20 (25 minutes)

Presenter: Mr DOLAN, Stephen (University of Oxford)

Neutrino charged current pionless ...

Contribution ID: 120

Type: not specified

#### Neutrino charged current pionless cross section measurements from MINERvA (I)

Thursday, 29 June 2017 09:45 (20 minutes)

**Presenter:** Dr BETANCOURT, Minerba (Fermilab)

Neutrino charged current pionless ...

Contribution ID: 121

Type: not specified

#### Neutrino charged current pionless cross section measurements from MINERvA (II)

Thursday, 29 June 2017 10:05 (20 minutes)

**Presenter:** Dr RUTERBORIES, Daniel (University of Rochester)

Validation of neutrino energy esti ...

Contribution ID: 122

Type: not specified

# Validation of neutrino energy estimation using electron scattering

Thursday, 29 June 2017 10:25 (25 minutes)

**Presenters:** Mr COHEN, Erez (Tel Aviv University); Mrs KHACHATRYAN, Mariana (Old Dominion University)

Correlations in quasielastic-like ...

Contribution ID: 123

Type: not specified

## Correlations in quasielastic-like neutrino-nucleus interactions

Thursday, 29 June 2017 11:10 (25 minutes)

Presenter: Prof. JACHOWICZ, natalie (Ghent University)

Weak quasi-elastic production of s...

Contribution ID: 124

Type: not specified

# Weak quasi-elastic production of single hyperons from nucleons and nuclei

Thursday, 29 June 2017 11:35 (20 minutes)

**Presenter:** Prof. ATHAR, Mohammad Sajjad (Department of Physics, Aligarh Muslim University, Aligarh)

SBND

Contribution ID: 125

Type: not specified

#### **SBND**

Thursday, 29 June 2017 13:30 (20 minutes)

**Presenters:** ANDREOPOULOS, Costas (Liverpool); Dr ANDREOPOULOS, Costas (University of Liverpool and STFC/RAL)

Session Classification: Future Experiments

The DUNE Near Detector

Contribution ID: 126

Type: not specified

### The DUNE Near Detector

Thursday, 29 June 2017 13:50 (20 minutes)

**Presenter:** MANLY, steven (University of Rochester) **Session Classification:** Future Experiments

High Pressure TPC R&D

Contribution ID: 127

Type: not specified

## High Pressure TPC R&D

Thursday, 29 June 2017 14:10 (20 minutes)

**Presenter:** MARTIN-ALBO, Justo (University of Oxford) **Session Classification:** Future Experiments

J-PARC Intermediate Water Chere ...

Contribution ID: 128

Type: not specified

## J-PARC Intermediate Water Cherenkov Detector

Thursday, 29 June 2017 14:30 (20 minutes)

**Presenter:** JAMIESON, blair (University of Winnipeg) **Session Classification:** Future Experiments

ANNIE

Contribution ID: 129

Type: not specified

### ANNIE

Thursday, 29 June 2017 14:50 (20 minutes)

**Presenter:** Mr O'FLAHERTY, Marcus (University of Sheffield) **Session Classification:** Future Experiments

NINJA

Contribution ID: 130

Type: not specified

## NINJA

Thursday, 29 June 2017 15:10 (20 minutes)

**Presenter:** Dr FUKUDA, Tsutomu (Nagoya University) **Session Classification:** Future Experiments

T2K ND280 upgrade

Contribution ID: 131

Type: not specified

## T2K ND280 upgrade

Thursday, 29 June 2017 16:00 (20 minutes)

**Presenter:** YOKOYAMA, Masashi (University of Tokyo)

Session Classification: Future Experiments

WAGASCI

Contribution ID: 132

Type: not specified

#### WAGASCI

Thursday, 29 June 2017 16:20 (20 minutes)

**Presenter:** MINAMINO, Akihiro (Yokohama National University) **Session Classification:** Future Experiments

The CERN Neutrino Platform

Contribution ID: 133

Type: not specified

## **The CERN Neutrino Platform**

Thursday, 29 June 2017 16:40 (20 minutes)

**Presenters:** DE ROECK, Albert (CERN); ALBERT, De Roeck (CERN) **Session Classification:** Future Experiments

Low Energy Neutrino Experiment...

Contribution ID: 134

Type: not specified

## Low Energy Neutrino Experiment Overview

Friday, 30 June 2017 09:00 (25 minutes)

**Presenter:** O'SULLIVAN, Erin (Stockholm University) **Session Classification:** Low Energy Neutrino Scattering

Supernova Fluxes

Contribution ID: 135

Type: not specified

## Supernova Fluxes

Friday, 30 June 2017 09:25 (25 minutes)

**Presenter:** O'CONNOR, Evan (Stockholm University)

Session Classification: Low Energy Neutrino Scattering

The COHERENT Experiment

Contribution ID: 136

Type: not specified

## The COHERENT Experiment

Friday, 30 June 2017 11:40 (20 minutes)

**Consider for Talk** 

Yes

**Presenter:** COLLAR, Juan (University of Chicago)

Session Classification: Low Energy Neutrino Scattering

Track Classification: Low Energy Neutrino Scattering

Neutrino measurements relevant t ...

Contribution ID: 137

Type: not specified

## Neutrino measurements relevant to gA quenching

*Friday, 30 June 2017 09:50 (20 minutes)* 

**Presenter:**PASTORE, Saori (Los Alamos National Laboratory)**Session Classification:**Low Energy Neutrino Scattering

Low energy argon cross section si ...

Contribution ID: 138

Type: not specified

## Low energy argon cross section simulations

*Friday, 30 June 2017 11:00 (20 minutes)* 

**Presenter:** GARDINER, Steven (University of California, Davis) **Session Classification:** Low Energy Neutrino Scattering

Argon cross section measurements

Contribution ID: 139

Type: not specified

## Argon cross section measurements

Friday, 30 June 2017 11:20 (20 minutes)

**Presenter:** Prof. COOPER, Robert (New Mexico State University) **Session Classification:** Low Energy Neutrino Scattering

Poster Session Winner 1

Contribution ID: 141

Type: not specified

# Poster Session Winner 1

Friday, 30 June 2017 13:30 (15 minutes)

**Presenter:** Mr DOLAN, Stephen (University of Oxford) **Session Classification:** poster presentation/nustec

Poster Session Winner 2

Contribution ID: 142

Type: not specified

## **Poster Session Winner 2**

Experimental Summary

Contribution ID: 143

Type: not specified

# **Experimental Summary**

Friday, 30 June 2017 14:10 (40 minutes)

Presenter: HARRIS, Deborah (Fermilab)

Theoretical Summary

Contribution ID: 144

Type: not specified

# **Theoretical Summary**

Friday, 30 June 2017 15:10 (40 minutes)

**Presenter:** Prof. MOSEL, Ulrich (University of Giessen)

Outlook to 2020

Contribution ID: 145

Type: not specified

# Outlook to 2020

Friday, 30 June 2017 15:50 (40 minutes)

**Presenter:** SANCHEZ, Federico (IFAE)

Contribution ID: 146

Type: not specified

# ARAPUCA light trap for large liquid argon time projection chambers

Tuesday, 27 June 2017 17:50 (20 minutes)

ARAPUCA is a totally innovative device for liquid argon scintillation light detection. It is composed of a passive light collector and of active devices. The latters are standard SiPMs that operate at liquid argon temperature, while the passive collector is a photon trap, which allows to collect light with extremely high efficiency. The total detection efficiency of the device can be tuned by modifying the ratio between the area of the active components (SiPM) and that of the optical window. Few arrays of ARAPUCAs will be installed inside the prototype of the Deep Underground Neutrino Experiment - protoDUNE - and their performances will be compared with those of more standard solutions based on guiding bars. The results of the most recent tests of ARAPUCAs in a liquid argon environment, which led to the actual design for the protoDUNE, will be reported together with the proposal of a photon detection system for the Deep Underground Neutrino Experiment based on ARAPUCAs combined with dielectric mirror foils coated by wavelength-shifter.

#### **Consider for Talk**

No

#### **Consider for Poster**

Yes

**Primary authors:** Prof. MACHADO, Ana (Universidade Federal do ABC); Prof. SEGRETO, Ettore (UNICAMP)

Co-author: Dr DA MOTTA, Hélio (CBPF)

Presenter: Dr DA MOTTA, Hélio (CBPF)

Session Classification: Poster Session

Track Classification: Future Experiments

NEUT update

Contribution ID: 147

Type: not specified

## NEUT update

Presenter: Dr HAYATO, Yoshinari (Kamioka obs., ICRR, Univ. of Tokyo)

R Ratio Measurements from Jlab

Contribution ID: 148

Type: not specified

### **R** Ratio Measurements from Jlab

We present results on the nuclear dependence ratio of R, the longitudinal and transverse structure function ratio. We present results on the difference between  $R_A(nucleus)$  and  $R_D(deuterium)$  for Carbon ( $R_C$ -  $R_D$ ), Aluminum ( $R_AL$  - $R_D$ ), Iron ( $R_Fe$ - $R_D$ ) and Copper ( $R_Cu$ - $R_C$ ) for  $Q^2=2$ , 3, and 4 GeV<sup>2</sup> from electron scattering experiments at Jefferson Lab.

#### **Consider for Talk**

Yes

#### **Consider for Poster**

No

#### Primary author: BODEK, Arie (University of Rochester)

Presenter: BODEK, Arie (University of Rochester)

Track Classification: Electron Scattering and Other Non-neutrino Measurements

Gd-relevant measurements

Contribution ID: 150

Type: not specified

## **Gd-relevant measurements**

Friday, 30 June 2017 10:10 (20 minutes)

Presenter: Dr LORENZ, Sebastian (Department of Physics, Okayama University)Session Classification: Low Energy Neutrino Scattering

Systematics in Neutrino Oscillatio...

Contribution ID: 151

Type: not specified

## **Systematics in Neutrino Oscillation Experiments**

*Tuesday, 27 June 2017 09:00 (25 minutes)* 

**Presenter:** HUBER, Patrick

Session Classification: Systematic Uncertainties and Impact on Oscillation Measurements

announcement

Contribution ID: 152

Type: not specified

#### announcement

*Tuesday, 27 June 2017 08:55 (5 minutes)* 

**Presenter:** Mr TANAKA, hirohisa (University of Toronto/IPP/TRIUMF)

Session Classification: announcement

NuSTEC

Contribution ID: 153

Type: not specified

### **NuSTEC**

Friday, 30 June 2017 13:45 (25 minutes)

**Presenter:** Prof. JACHOWICZ, natalie (Ghent University) **Session Classification:** poster presentation/nustec

announcement

Contribution ID: 154

Type: not specified

#### announcement

Wednesday, 28 June 2017 08:55 (5 minutes)

**Presenter:** Mr TANAKA, hirohisa (University of Toronto/IPP/TRIUMF)

Session Classification: Announcement

poster presentation

Contribution ID: 155

Type: not specified

# poster presentation

Thursday, 29 June 2017 17:20 (10 minutes)

**Presenter:** ELKINS, Miranda (University of Minnesota - Duluth) **Session Classification:** Discussion

Production and radiative decay of ...

Contribution ID: 156

Type: not specified

# Production and radiative decay of heavy neutrinos at the Booster Neutrino Beam

Tuesday, 27 June 2017 17:50 (2 hours)

Presenters: Mr SAUL SALA, Eduardo (Universidad de Valencia); Dr ALVAREZ RUSO, Luis (IFIC)

Analyzing the nuclear recoil syste ...

Contribution ID: 157

Type: not specified

# Analyzing the nuclear recoil system in neutrino-nucleus reactions

Tuesday, 27 June 2017 17:50 (2 hours)

**Presenter:** MORRISON, Jacob (Michigan State University)

Multinucleon Excitation (2p2h) M...

Contribution ID: 158

Type: not specified

## Multinucleon Excitation (2p2h) Model Comparison

Tuesday, 27 June 2017 17:50 (2 hours)

**Presenter:** CUDD, Andrew (Michigan State University) **Session Classification:** Poster Session

\nu\_{\mu} CC-0pi Interactions on L ...

Contribution ID: 159

Type: not specified

### \nu\_{\mu} CC-0pi Interactions on Lead in the Near Detector of the T2K Experiment

Tuesday, 27 June 2017 17:50 (2 hours)

**Presenter:** Dr WACHALA, Tomasz (Institute of Nuclear Physics PAN)

Constraining The T2K Neutrino Fl ...

Contribution ID: 160

Type: not specified

### **Constraining The T2K Neutrino Flux with** NA61/SHINE Replica Target Data

*Tuesday, 27 June 2017 17:50 (2 hours)* 

**Presenter:** VLADISAVLJEVIC, Tomislav (University of Oxford and Kavli Institute for the Physics and Mathematics of the Universe)

NuPRISM detector performance an ...

Contribution ID: 161

Type: not specified

# NuPRISM detector performance and optimization study

*Tuesday, 27 June 2017 17:50 (2 hours)* 

**Presenter:** YOSHIDA, Tomoyo (Tokyo Institute of Technology) **Session Classification:** Poster Session

Measurement of gamma rays from ...

Contribution ID: 162

Type: not specified

### Measurement of gamma rays from giant resonances of 16O and 12C with application to supernova neutrino detection.

*Tuesday, 27 June 2017 17:50 (2 hours)* 

**Presenter:** Mr REEN, Mandeep (Okayama University) **Session Classification:** Poster Session

Investigations of Cross Section Mo...

Contribution ID: 163

Type: not specified

### Investigations of Cross Section Model and Near Detector Choices for DUNE.

Tuesday, 27 June 2017 17:50 (2 hours)

**Presenter:** CALCUTT, Jake (Michigan State University)

Electron neutrino quasi elastic sca...

Contribution ID: 164

Type: not specified

## Electron neutrino quasi elastic scattering in Minerva

Tuesday, 27 June 2017 17:50 (2 hours)

**Presenter:** HAN, Jiyeon (Pittsburgh university) **Session Classification:** Poster Session

Modeling gamma-rays from the th ...

Contribution ID: 165

Type: not specified

# Modeling gamma-rays from the thermal neutron capture on gadolinium based on JPARC-ANNRI data

Tuesday, 27 June 2017 17:50 (2 hours)

Presenter: Dr LORENZ, Sebastian (Department of Physics, Okayama University)

Progress of the Measurement of th ...

Contribution ID: 166

Type: not specified

### Progress of the Measurement of the Electron Neutrino Charged-current Inclusive Cross Section in NOvA

*Tuesday, 27 June 2017 17:50 (2 hours)* 

**Presenter:** Dr ALIAGA SOPLIN, Leonidas (Fermilab) **Session Classification:** Poster Session

An Inclusive Neutral Pion Product...

Contribution ID: 167

Type: not specified

### An Inclusive Neutral Pion Production in Charged Current Muon Neutrinos Analysis at the NOvA Near Detector

*Tuesday, 27 June 2017 17:50 (2 hours)* 

NOvA tuning of the GENIE genera...

Contribution ID: 168

Type: not specified

# NOvA tuning of the GENIE generator using internal and external data constraints

Tuesday, 27 June 2017 17:50 (2 hours)

Presenter:WOLCOTT, Jeremy (Tufts University)Session Classification:Poster Session

Measurement of Neutral Current C ...

Contribution ID: 169

Type: not specified

# Measurement of Neutral Current Coherent $\Pi_0$ Production In The NOvA Near Detector

*Tuesday, 27 June 2017 17:50 (2 hours)* 

**Presenter:** DUYANG, Hongyue (University of South Carolina)

MINERvA Model to Describe...

Contribution ID: 170

Type: not specified

### MINERvA Model to Describe (Anti)Neutrino-Nucleon Scattering

Tuesday, 27 June 2017 17:50 (2 hours)

**Presenter:** Dr RUTERBORIES, Daniel (University of Rochester)

Measurement of Neutrino Induced ...

Contribution ID: 171

Type: not specified

#### Measurement of Neutrino Induced Resonance Pion Production in the NOMAD Detector

*Tuesday, 27 June 2017 17:50 (2 hours)* 

**Presenter:** DUYANG, Hongyue (University of South Carolina)

Measurement of Muon Neutrino ...

Contribution ID: 172

Type: not specified

### Measurement of Muon Neutrino Quasi-Elastic-Like Scattering in MINERvA at Ev~6 GeV

*Tuesday, 27 June 2017 17:50 (2 hours)* 

Presenter: Dr CARNEIRO, Mateus (Oregon State University)

Hadron Production Measurements ...

Contribution ID: 173

Type: not specified

### Hadron Production Measurements with a Hybrid Emulsion/Electronic Detector

Tuesday, 27 June 2017 17:50 (20 minutes)

**Presenters:** Dr HARTZ, Mark (Kavli IPMU (WPI), University of Tokyo/TRIUMF); Dr FUKUDA, Tsutomu (Nagoya University)

Measurement of Deep Inelastic Sc ...

Contribution ID: 174

Type: not specified

### Measurement of Deep Inelastic Scattering Cross Section in the MINERvA Detector

Tuesday, 27 June 2017 17:50 (2 hours)

Presenter:Ms WOSPAKRIK, Marianette (1986)Session Classification:Poster Session

Measurement of gamma ray produ...

Contribution ID: 175

Type: not specified

# Measurement of gamma ray production from a neutron beam on water

*Tuesday, 27 June 2017 17:50 (2 hours)* 

**Presenter:** NANTAIS, Corina (University of Toronto)

Identification of nuclear effects in ...

Contribution ID: 176

Type: not specified

#### Identification of nuclear effects in CCQE-like neutrino-hydrocarbon interactions using transverse kinematic imbalances

Tuesday, 27 June 2017 17:50 (2 hours)

**Presenter:** Mr DOLAN, Stephen (University of Oxford) **Session Classification:** Poster Session

Controlling uncertainties in the Sh...

Contribution ID: 177

Type: not specified

#### Controlling uncertainties in the Short Baseline Neutrino program

Tuesday, 27 June 2017 17:50 (2 hours)

Presenter: Dr CASTILLO FERNANDEZ, Raquel (Reserach Associate)

Improvements to the Pion Second ...

Contribution ID: 178

Type: not specified

## Improvements to the Pion Secondary Interaction Systematic Uncertainties at T2K

Tuesday, 27 June 2017 17:50 (2 hours)

**Presenter:** Mr YU, Mitchell (York University) **Session Classification:** Poster Session

Tackling the Neutrino Oscillation ...

Contribution ID: 179

Type: not specified

## **Tackling the Neutrino Oscillation Problem**

*Tuesday, 27 June 2017 17:50 (2 hours)* 

**Presenter:** PAPADOPOULOU, Afroditi (Graduate Student)

Quasi-elastic neutrino-argon scatt ...

Contribution ID: 180

Type: not specified

# Quasi-elastic neutrino-argon scattering in a CRPA approach

Tuesday, 27 June 2017 17:50 (2 hours)

**Presenter:** Mr VAN DESSEL, Nils (Ghent University)

Hadronic interaction measuremen...

Contribution ID: 181

Type: not specified

#### Hadronic interaction measurements with the Hybrid Emulsion Detector

Tuesday, 27 June 2017 17:50 (2 hours)

Presenter: Mr GAMEIL, Khalid (University of British Columbia)

Techniques for a Combined Neutri...

Contribution ID: 182

Type: not specified

#### **Techniques for a Combined Neutrino Flux and Cross Section Unfolding**

*Tuesday, 27 June 2017 17:50 (20 minutes)* 

**Presenters:** Mr MANDALIA, Shivesh (Queen Mary University of London); Dr KATORI, Teppei (Queen Mary University of London)

Investigation of multi-nucleon effe ...

Contribution ID: 183

Type: not specified

# Investigation of multi-nucleon effects and neutron counting in antineutrino-carbon reactions.

Tuesday, 27 June 2017 17:50 (2 hours)

**Presenter:** ELKINS, Miranda (University of Minnesota - Duluth) **Session Classification:** Poster Session

Neutral Current Single Pi0 event r...

Contribution ID: 184

Type: not specified

#### Neutral Current Single Pi0 event rate on water in Pi0 Detector at T2K

Tuesday, 27 June 2017 17:50 (2 hours)

**Presenter:** VALLARI, Zoya (Stony Brook University)

A New Framework To Extract The ...

Contribution ID: 185

Type: not specified

#### A New Framework To Extract The Electron Anti-neutrinos Cross Section At The T2K Off-Axis Near

*Tuesday, 27 June 2017 17:50 (2 hours)* 

**Presenter:** Mr SHAKER, Fady (University of Winnipeg) **Session Classification:** Poster Session

NUISANCE and single pion produ...

Contribution ID: 186

Type: not specified

# NUISANCE and single pion production on the nucleon

Tuesday, 27 June 2017 17:50 (2 hours)

**Presenter:** Mr WRET, Clarence (Imperial College London)

Progress of the Charged Pion Semi- ...

Contribution ID: 187

Type: not specified

### Progress of the Charged Pion Semi-Inclusive Neutrino Charged-Current Cross Section in NOvA

Tuesday, 27 June 2017 17:50 (2 hours)