### NuSTEC Workshop on Shallow- and Deep-Inelastic Scattering

Report of Contributions

Contribution ID: 1 Type: **not specified** 

**1A** 

Contribution ID: 2 Type: **not specified** 

# 1B - Neutrino SIS and DIS in OScillation experiments (30')

**Presenter:** Dr KATORI, Teppei (Queen Mary University of London)

Session Classification: 1: General introduction and considerations from non-neutrino com-

munities

Contribution ID: 3 Type: **not specified** 

# 1A - e-A community studies of the SIS/DIS region (60'+10')

Thursday 11 October 2018 09:00 (1h 10m)

**Presenter:** Prof. KEPPEL, Thia (Jefferson Lab, USA)

Session Classification: 1: General introduction and considerations from non-neutrino com-

munities

Contribution ID: 4

Type: not specified

# 2A - Implementation of Rein-Sehgal and Berger-Sehgal in GENIE (30'+10')

Thursday 11 October 2018 11:00 (40 minutes)

**Presenter:** Prof. DYTMAN, Steve (University of Pittsburgh, USA)

Session Classification: 2: Generator / Transport treatments of the SIS and DIS region

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

#### 2B - Status of the Bodek-Yang Model (30')

Thursday 11 October 2018 11:40 (30 minutes)

Presenter: Prof. YANG, Un Ki (Seoul National University (KR))

**Session Classification:** 2: Generator / Transport treatments of the SIS and DIS region

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

#### 2C - GiBUU

**Session Classification:** 2: Generator / Transport treatments of the SIS and DIS region

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

#### 2C - GENIE

**Session Classification:** 2: Generator / Transport treatments of the SIS and DIS region

Contribution ID: 8 Type: not specified

#### 2C - NuWro

**Session Classification:** 2: Generator / Transport treatments of the SIS and DIS region

Contribution ID: 9 Type: not specified

#### 2C - NEUT

**Session Classification:** 2: Generator / Transport treatments of the SIS and DIS region

Contribution ID: 10 Type: not specified

#### 2D - Generator Comparison of SIS/DIS treatment-Overview

 $\textbf{Session Classification:} \ \ 2: \ Generator \ / \ Transport \ treatments \ of the \ SIS \ and \ DIS \ region$ 

NuSTEC Works ··· / Report of Contributions 3A - NOvA (30'+10')

Contribution ID: 11 Type: not specified

3A - NOvA (30'+10')

Thursday 11 October 2018 17:00 (40 minutes)

**Presenter:** Prof. MUETHER, Mathew (Fermilab)

Session Classification: 3: Sensitivity of oscillation parameters to the SIS and DIS region

Contribution ID: 12 Type: not specified

### 3B - SIS/DIS interactions and related uncertainties in atmospheric neutrino oscillation analysis (30')

Thursday 11 October 2018 17:40 (30 minutes)

**Presenter:** Dr BRONNER, Christophe (University of Tokyo)

Session Classification: 3: Sensitivity of oscillation parameters to the SIS and DIS region

Contribution ID: 13 Type: not specified

#### 4A - Isobar models of resonance production

Session Classification: 4: Resonant and non-resonant pion production with W > Delta

Contribution ID: 14 Type: not specified

#### 4A - Dynamical coupled-channel models

Presenter: Dr NAKAMURA, Satoshi (Universidade Cruzeiro do Sul, Brazil)

Session Classification: 4: Resonant and non-resonant pion production with W > Delta

Contribution ID: 15 Type: not specified

#### 3C - GiBUU

**Session Classification:** 2: Generator / Transport treatments of the SIS and DIS region

Contribution ID: 16 Type: not specified

#### 2C - GENIE

**Session Classification:** 2: Generator / Transport treatments of the SIS and DIS region

Contribution ID: 17 Type: not specified

#### 2C - NuWro

**Session Classification:** 2: Generator / Transport treatments of the SIS and DIS region

Contribution ID: 18 Type: not specified

#### 2C - NEUT

**Session Classification:** 2: Generator / Transport treatments of the SIS and DIS region

Contribution ID: 19 Type: not specified

#### 2D - Generator Comparison of SIS/DIS treatment-Overview

 $\textbf{Session Classification:} \ \ 2: \ Generator \ / \ Transport \ treatments \ of the \ SIS \ and \ DIS \ region$ 

Contribution ID: 20 Type: not specified

2C - GiBUU (20'+5')

Thursday 11 October 2018 14:00 (25 minutes)

**Presenter:** Dr GALLMEISTER, Kai (Goethe University Frankfurt, Germany)

**Session Classification:** 2: Generator / Transport treatments of the SIS and DIS region

Contribution ID: 21 Type: not specified

#### 2C - Tuning the pion production in GENIE v3 (20'+5')

Thursday 11 October 2018 14:25 (25 minutes)

**Presenter:** TENA VIDAL, Julia (University of Liverpool)

**Session Classification:** 2: Generator / Transport treatments of the SIS and DIS region

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2C - NuWro (15'+5')

Contribution ID: 22 Type: not specified

2C - NuWro (15'+5')

Thursday 11 October 2018 14:50 (20 minutes)

**Presenter:** Prof. SOBCZYK, Jan (Wroclaw University, Poland)

**Session Classification:** 2: Generator / Transport treatments of the SIS and DIS region

Contribution ID: 23 Type: not specified

#### 2C - DIS Event Generation in NEUT (20'+5')

Thursday 11 October 2018 15:10 (25 minutes)

**Presenter:** Dr BRONNER, Christophe (University of Tokyo, Japan)

**Session Classification:** 2: Generator / Transport treatments of the SIS and DIS region

Contribution ID: 24 Type: not specified

#### 2D - Generator Comparison of SIS/DIS treatment-Overview (25')

Thursday 11 October 2018 15:35 (25 minutes)

**Presenter:** Dr BRONNER, Christophe (University of Tokyo)

**Session Classification:** 2: Generator / Transport treatments of the SIS and DIS region

Contribution ID: 25 Type: not specified

# 4B - Non-resonant and interference effects in pion production (30'+5')

Friday 12 October 2018 09:35 (35 minutes)

**Presenter:** Dr KABIRNEZHAD, Minoo

Session Classification: 4: Resonant and non-resonant pion production with W > Delta

Contribution ID: 26 Type: not specified

# 4C - Experimental nu-A higher-W pion production studies (20')

Friday 12 October 2018 10:10 (20 minutes)

Presenter: Prof. DYTMAN, Steve (Univ of Pittsburgh, USA)

Session Classification: 4: Resonant and non-resonant pion production with W > Delta

Contribution ID: 27 Type: not specified

# 5A - Duality in e-nucleon / nucleus scattering (30'+10')

Friday 12 October 2018 11:20 (40 minutes)

Presenter: Prof. CHRISTY, Eric (Hampton University, USA)

**Session Classification:** 5: The transition from SIS to DIS

Contribution ID: 28 Type: not specified

#### 5B - Duality in neutrino nucleus scattering (30')

Friday 12 October 2018 12:00 (30 minutes)

**Presenter:** Prof. PASCHOS, Emmanuel (University of Dortmund, Germany)

**Session Classification:** 5: The transition from SIS to DIS

Contribution ID: 29 Type: not specified

# 5C - Higher Twist and Duality in the SIS/DIS transition (30'+10')

Friday 12 October 2018 14:30 (40 minutes)

**Presenter:** Dr HAIDER, Huma (Aligarh Muslim University, India)

**Session Classification:** 5: The transition from SIS to DIS

Contribution ID: 30 Type: not specified

# 5D - Chiral Field and Regge theory in the transition region (30')

Friday 12 October 2018 15:10 (30 minutes)

Presenter: Prof. JACHOWICZ, Natalie (Ghent University, Department of Subatomic and Radiation

Physics)

**Session Classification:** 5: The transition from SIS to DIS

Contribution ID: 31 Type: not specified

#### 6A - Nuclear Medium Effects on Structure Functions I

**Presenter:** Prof. ATHAR, Mohammad Sajjad (Aligarh Muslim University, India)

Session Classification: 6: Nuclear modifications of structure functions and nuclear PDFs

Contribution ID: 32 Type: not specified

### 6B - Nuclear Medium Effects on Structure Functions II

Presenter: Dr KULAGIN, Sergey (INR, Moscow, Russia)

Session Classification: 6: Nuclear modifications of structure functions and nuclear PDFs

Contribution ID: 33 Type: not specified

### 6C - nPDFs from e/mu-A and nu-A scattering (30'+10')

Saturday 13 October 2018 09:00 (40 minutes)

**Presenter:** Dr KUSINA, Aleksander (IFJ PAN, Poland)

Session Classification: 6: Nuclear modifications of structure functions and nuclear PDFs

Contribution ID: 34 Type: not specified

#### 6D - nPDFs from e/mu-A and nu-A scattering II

**Session Classification:** 6: Nuclear modifications of structure functions and nuclear PDFs

Contribution ID: 35 Type: not specified

# Determining if Partonic Nuclear Effects are different for nu-A compared to e-A Scattering(30')

Session Classification: 6: Nuclear modifications of structure functions and nuclear PDFs

Contribution ID: 36 Type: not specified

## 7A - The Lund Hadronization Model (30'+10')

Saturday 13 October 2018 11:00 (40 minutes)

**Presenter:** Dr PRESTEL, Stefan (Lund University/Fermilab)

**Session Classification:** 7: Hadronization in the nuclear environment

Contribution ID: 37 Type: not specified

## 7A - Hadronization models in neutrino event generators

**Presenter:** Dr KATORI, Teppei (Queen Mary University of London)

**Session Classification:** 7: Hadronization in the nuclear environment

Contribution ID: 38 Type: not specified

#### 7C - Hadronization in FLUKA

**Presenter:** Dr SALA, Paola (CERN and INFN Milano)

**Session Classification:** 7: Hadronization in the nuclear environment

Contribution ID: 39 Type: not specified

## 7D - Hadronization in DPMJET

**Session Classification:** 7: Hadronization in the nuclear environment

Contribution ID: 40 Type: not specified

### 7B - The GENIE Hadronization Model (30')

Saturday 13 October 2018 11:40 (30 minutes)

**Presenter:** Dr ANDREOPOULOS, Costas (University of Liverpool)

**Session Classification:** 7: Hadronization in the nuclear environment

Contribution ID: 41 Type: not specified

### 7C - Hadronization in FLUKA (30'+10')

Saturday 13 October 2018 14:00 (40 minutes)

**Presenter:** Dr SALA, Paola (CERN and INFN Milano)

**Session Classification:** 7: Hadronization in the nuclear environment

Contribution ID: 42

Type: not specified

# 7D - Hadronization systematic errors for neutrino experiments (20'+10')

**Presenter:** Dr KATORI, Teppei (Queen Mary University of London)

**Session Classification:** 7: Hadronization in the nuclear environment

Contribution ID: 43 Type: not specified

#### **1C - TBA**

**Presenter:** Dr GALLMEISTER, Kai (Goethe Universität Frankfurt)

Session Classification: 1: General introduction and considerations from non-neutrino com-

munities

Contribution ID: 44 Type: **not specified** 

### 4A - Dynamical coupled-channel models (30'+5')

Friday 12 October 2018 09:00 (35 minutes)

Presenter: Dr NAKAMURA, Satoshi (Universidade Cruzeiro do Sul, Brazil)

Session Classification: 4: Resonant and non-resonant pion production with W > Delta

Contribution ID: 45 Type: not specified

## 6A - Nuclear Medium Effects on Structure Functions I (30'+10')

Friday 12 October 2018 16:30 (40 minutes)

Presenter: Prof. ATHAR, Mohammad Sajjad (Aligarh Muslim University)

Session Classification: 6: Nuclear modifications of structure functions and nuclear PDFs

Contribution ID: 46 Type: not specified

## 6B - Nuclear Medium Effects on Structure Functions II (30')

Friday 12 October 2018 17:10 (30 minutes)

Presenter: Dr KULAGIN, Sergey (INR, Moscow, Russia)

Session Classification: 6: Nuclear modifications of structure functions and nuclear PDFs

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

### 7D - Hadronization in eA collisions (15'+5')

Saturday 13 October 2018 14:40 (20 minutes)

**Presenter:** Dr GALLMEISTER, Kai (Goethe Universität Frankfurt)

**Session Classification:** 7: Hadronization in the nuclear environment

Contribution ID: 48

Type: not specified

## 7E - Neutrino SIS systematic errors for oscillation experiments (30')

Saturday 13 October 2018 15:00 (30 minutes)

**Presenter:** Dr KATORI, Teppei (Queen Mary University of London)

**Session Classification:** 7: Hadronization in the nuclear environment