

Modeling neutrino-nucleus interactions



Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome from ECT*

Monday 9 July 2018 09:00 (30 minutes)

Contribution ID: 2

Type: **not specified**

Introduction: Why and how to model neutrino-nucleus interactions?

Monday 9 July 2018 09:30 (30 minutes)

Authors: Dr SANCHEZ, Federico; Dr MOSEL, Ulrich (Universität Giessen)

Presenters: Dr SANCHEZ, Federico; Dr MOSEL, Ulrich (Universität Giessen)

Contribution ID: 3

Type: **not specified**

Neutrino-nucleus interactions

Monday 9 July 2018 10:00 (45 minutes)

Presenter: Dr C., Horowitz

Contribution ID: 4

Type: **not specified**

Semi-inclusive Electroweak Reactions

Monday 9 July 2018 11:15 (45 minutes)

Presenter: Prof. B., Donnelly

Contribution ID: 5

Type: **not specified**

NEUT

Tuesday 10 July 2018 09:00 (35 minutes)

Presenter: Dr Y., Hayato

Contribution ID: 6

Type: **not specified**

GENIE

Tuesday 10 July 2018 09:35 (35 minutes)

Presenter: Dr PERDUE, G.

Contribution ID: 7

Type: **not specified**

GIBUU

Tuesday 10 July 2018 10:40 (35 minutes)

Presenter: Dr MOSEL, Ulrich (Universität Giessen)

Contribution ID: 8

Type: **not specified**

NuWro

Tuesday 10 July 2018 11:15 (45 minutes)

Presenter: Dr SOBCZYCK, J.

Contribution ID: 9

Type: **not specified**

Discussion

Monday 9 July 2018 17:00 (1 hour)

Presenter: SANCHEZ, Federico (Institut de Fisica d'Altes Energies& Barcelona Institute of Science and Technology)

Contribution ID: **10**

Type: **not specified**

QE-like in generators: NEUT

Wednesday 11 July 2018 10:00 (25 minutes)

Presenter: Dr HAYATO, Y.

Contribution ID: 11

Type: **not specified**

QE-like in generators: GENIE

Wednesday 11 July 2018 10:25 (30 minutes)

Presenter: Dr PERDUE, G

Contribution ID: 12

Type: **not specified**

QE-like in generators: NuWro

Wednesday 11 July 2018 11:25 (25 minutes)

Presenter: JUSZCZAK, Cezary (University of Wrocław)

Contribution ID: 13

Type: **not specified**

The case of eA scattering to understand QE Scattering

Tuesday 10 July 2018 16:00 (45 minutes)

Presenter: Dr ASHKENAZI, A.

Contribution ID: **14**Type: **not specified**

MINERvA

Monday 9 July 2018 14:15 (45 minutes)

This is a general talk about the experiment: detector, flux, and what monte carlo is used.

Presenter: MCFARLAND, Kevin (University of Rochester)

Contribution ID: 15

Type: **not specified**

T2K/T2HK (K.Mahn)

Monday 9 July 2018 13:30 (45 minutes)

Presenter: Prof. K., Mahn

Contribution ID: **16**

Type: **not specified**

NOvA

Monday 9 July 2018 15:00 (30 minutes)

Presenter: Prof. A., Mislievc

Contribution ID: 17

Type: **not specified**

DUNE

Thursday 12 July 2018 10:05 (45 minutes)

Presenter: NOWAK, Jaroslaw (Lancaster University)

Contribution ID: **18**

Type: **not specified**

MicroBooNE

Monday 9 July 2018 16:00 (30 minutes)

Presenter: Dr A., Ashkenazi

Contribution ID: **19**

Type: **not specified**

IceCube

Monday 9 July 2018 16:30 (30 minutes)

Presenter: Dr KATORI, Teppei

Contribution ID: 20

Type: **not specified**

Unified description of lepton-nucleus scattering within the spectral function formalism

Tuesday 10 July 2018 14:00 (45 minutes)

Presenter: Prof. BENHAR, O.

Contribution ID: **21**

Type: **not specified**

SuSa

Tuesday 10 July 2018 14:45 (45 minutes)

Presenter: Prof. J.A., Caballero

Contribution ID: 22

Type: **not specified**

2p2h Overview

Wednesday 11 July 2018 14:10 (50 minutes)

Presenter: Dr ALVAREZ RUSO, L.A.

Contribution ID: 23

Type: **not specified**

Realtivistic 2p2h model, implementation in GENIE and comparison with data

Wednesday 11 July 2018 17:15 (35 minutes)

Presenter: Dr MEGIAS, Guillermo D. (DPhP, CEA-Irfu (France) and University of Seville (Spain))

Contribution ID: 24

Type: **not specified**

2p2h implementation in NEUT

Wednesday 11 July 2018 16:30 (20 minutes)

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

Contribution ID: 25

Type: **not specified**

2p2h implementation in GENIE

Wednesday 11 July 2018 15:30 (30 minutes)

Presenter: Prof. GRAN, R.

Contribution ID: 26

Type: **not specified**

2p2h implementation in GiBuu

Wednesday 11 July 2018 16:50 (25 minutes)

Presenter: Dr MOSEL, Ulrich (Universität Giessen)

Contribution ID: 27

Type: **not specified**

2p2h implementation in NuWro

Wednesday 11 July 2018 13:30 (40 minutes)

Presenter: Dr K, Niewczas

Contribution ID: **28**

Type: **not specified**

Discussion

Presenter: Prof. BARBARO, Maria B. (Università di Torino)

Contribution ID: 29

Type: **not specified**

Pion Production Theory

Thursday 12 July 2018 09:00 (1h 5m)

Presenter: Prof. MILLER, G.A.

Contribution ID: **30**

Type: **not specified**

Pion production and absorption in NEUT

Thursday 12 July 2018 11:40 (20 minutes)

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

Contribution ID: **31**

Type: **not specified**

Pion production and absorption in GENIE

Thursday 12 July 2018 12:00 (30 minutes)

Presenter: PERDUE, Gabriel (Fermilab)

Contribution ID: 32

Type: **not specified**

Pion production and absorption in GiBUU

Thursday 12 July 2018 14:00 (30 minutes)

Presenter: Dr MOSEL, Ulrich (Universität Giessen)

Contribution ID: 33

Type: **not specified**

Pion production and absorption in NuWro

Thursday 12 July 2018 14:30 (30 minutes)

Presenter: SOBCZYK, Jan (Wroclaw University)

Contribution ID: 34

Type: **not specified**

Discussion: DIS in Generators

Thursday 12 July 2018 16:00 (20 minutes)

Contribution ID: 35

Type: **not specified**

Discussion

Thursday 12 July 2018 16:20 (45 minutes)

Contribution ID: 36

Type: **not specified**

New mathematical tools for MC generation (Neural Nets and Deep Learning)

Friday 13 July 2018 14:15 (30 minutes)

Presenter: Dr PERDUE, G.

Contribution ID: 37

Type: **not specified**

FSI cascade model Roundtable and discussion

Friday 13 July 2018 11:25 (1 hour)

Contribution ID: **38**

Type: **not specified**

FSI in transport models

Friday 13 July 2018 09:45 (1h 10m)

Presenter: Dr MOSEL, Ulrich (Universität Giessen)

Contribution ID: 39

Type: **not specified**

Informal discussions

Friday 13 July 2018 15:00 (1 hour)

Contribution ID: 40

Type: **not specified**

Use of ab initio approaches for accurate lepton-nucleus scattering

Tuesday 10 July 2018 13:30 (30 minutes)

Presenter: BARBIERI, Carlo (University of Surrey)

Contribution ID: 41

Type: **not specified**

QE-like in generators: GIBUU

Wednesday 11 July 2018 11:50 (25 minutes)

Presenter: Dr MOSEL, Ulrich (Universität Giessen)

Contribution ID: 42

Type: **not specified**

Discussion of the role of e-A generators and measurements

Tuesday 10 July 2018 16:45 (1h 15m)

Presenter: Dr JACHOWICZ, Natalie (Gent University)

Contribution ID: 43

Type: **not specified**

Transverse variables, QE and 2p2h

Wednesday 11 July 2018 17:50 (25 minutes)

Presenter: Dr DOHLAN, S.

Contribution ID: 44

Type: **not specified**

Discussion

Contribution ID: 45

Type: **not specified**

FLUKA: a multi-particle transport code

Thursday 12 July 2018 15:00 (30 minutes)

Presenter: SALA, Paola (INFN Milano)

Contribution ID: 46

Type: **not specified**

MINERvA 2p2h Tune

Wednesday 11 July 2018 15:00 (30 minutes)

Presenter: MCFARLAND, Kevin (University of Rochester)

Contribution ID: 47

Type: **not specified**

MINERvA Pion Tune

Thursday 12 July 2018 11:15 (25 minutes)

Presenter: MCFARLAND, Kevin (University of Rochester)

Contribution ID: 48

Type: **not specified**

Discussion: Developing Better Theory-Generator Interfaces

Friday 13 July 2018 13:45 (30 minutes)

Presenter: Dr PERDUE, Gabriel (Fermilab)

Contribution ID: 49

Type: **not specified**

eA data compared to Neutrino Generators

Wednesday 11 July 2018 09:00 (1 hour)

Presenter: ASKENAZI, Adi

Contribution ID: 50

Type: **not specified**

Workshop summary and plans for report

Friday 13 July 2018 14:45 (10 minutes)