

DUNE Module of Opportunity Workshop

Report of Contributions

Contribution ID : 6

Type : **not specified**

Opening remarks

Wednesday, 2 November 2022 09:30 (20)

Presenter(s) : HERMENEGILDO, Carlos (Universitat de Valencia); FUSTER VERDU, Juan Antonio (IFIC (Instituto de Fisica Corpuscular)); RIUS, Nuria (IFIC, Valencia University-CSIC); HERNANDEZ, Pilar (University of Valencia)

Session Classification : Introduction and Context Sessions

Contribution ID : 7

Type : **not specified**

The DUNE international project, the US particle physics roadmap, and deliverables for this workshop

Wednesday, 2 November 2022 10:00 (30)

Presenter(s) : BERTOLUCCI, Sergio (CERN)

Session Classification : Introduction and Context Sessions

Contribution ID : 8

Type : **not specified**

A global view on detector R&D roadmaps

Wednesday, 2 November 2022 10:30 (30)

Presenter(s) : GUENETTE, Roxanne (University of Manchester)

Session Classification : Introduction and Context Sessions

Contribution ID : 9

Type : **not specified**

Summary of the 2019 MoO workshop at BNL

Wednesday, 2 November 2022 11:30 (30)

Presenter(s) : KETTELL, Steve (BNL)

Session Classification : Introduction and Context Sessions

Contribution ID : **10**

Type : **not specified**

DUNE physics and detector requirements

Wednesday, 2 November 2022 12:00 (30)

Presenter(s) : MARSHALL, Chris (University of Rochester)

Session Classification : Introduction and Context Sessions

Contribution ID : 11

Type : **not specified**

LAr technology improvements to expand DUNE physics goals (REMOTE)

Wednesday, 2 November 2022 12:30 (30)

Presenter(s) : MARCHIONNI, Alberto (FNAL)

Session Classification : Introduction and Context Sessions

Contribution ID : 12

Type : **not specified**

Dark matter search strategies at the far detector

Thursday, 3 November 2022 09:30 (30)

Presenter(s) : YU, Jaehoon (University of Texas Arlington)

Session Classification : Physics Sessions

Contribution ID : 13

Type : **not specified**

Theory goals in solar and supernova neutrinos (REMOTE)

Wednesday, 2 November 2022 15:00 (30)

Presenter(s) : LI, Shirley (FNAL)

Session Classification : Physics Sessions

Contribution ID : 14

Type : **not specified**

Tau neutrinos (REMOTE)

Wednesday, 2 November 2022 15:30 (30)

Presenter(s) : MACHADO, Pedro (FNAL)

Session Classification : Physics Sessions

Contribution ID : 15

Type : **Oral presentation**

LArPix (REMOTE)

Wednesday, 2 November 2022 16:30 (30)

Presenter(s) : DWYER, Dan (Lawrence Berkeley National Lab)

Session Classification : R&D Sessions

Contribution ID : 16

Type : **not specified**

Q-Pix charge readout design and prototyping

Wednesday, 2 November 2022 17:00 (30)

Presenter(s) : ASAADI, Jonathan (University of Texas at Arlington)

Session Classification : R&D Sessions

Contribution ID : 17

Type : **not specified**

Optical readout of the ARIADNE LArTPC using a Timepix3-based camera

Friday, 4 November 2022 15:00 (30)

Presenter(s) : MAVROKORIDIS, Konstantinos (University of Liverpool)

Session Classification : R&D Sessions

Contribution ID : **18**

Type : **not specified**

What we know we won't know in 2035 (REMOTE)

Wednesday, 2 November 2022 14:30 (30)

Presenter(s) : PASCOLI, Silvia (University of Bologna)

Session Classification : Physics Sessions

Contribution ID : 19

Type : **not specified**

Why you should be excited about baryon number violation (REMOTE)

Thursday, 3 November 2022 10:00 (30)

Presenter(s) : DEV, Bhupal (Washington University in St. Louis)

Session Classification : Physics Sessions

Contribution ID : 20

Type : **not specified**

Long-baseline oscillation physics and non-standard scenarios

Thursday, 3 November 2022 10:30 (30)

Presenter(s) : TÓRTOLA, Mariam (IFIC, CSIC / Univ. de Valencia)

Session Classification : Physics Sessions

Contribution ID : 21

Type : **not specified**

Optimized Vertical Drift for FD3/FD4

Thursday, 3 November 2022 11:30 (30)

Presenter(s) : CAVANNA, Flavio (FNAL)

Session Classification : Detector Concepts Sessions

Contribution ID : 22

Type : **not specified**

SLoMo concept

Thursday, 3 November 2022 12:00 (30)

Presenter(s) : CHURCH, Eric (PNNL)

Session Classification : Detector Concepts Sessions

Contribution ID : 23

Type : **not specified**

SoLAr concept

Thursday, 3 November 2022 12:30 (30)

Presenter(s) : NAVRER-AGASSON, Anyssa (University of Manchester)

Session Classification : Detector Concepts Sessions

Contribution ID : 24

Type : **not specified**

Low-radioactivity underground argon production chain: the Darkside experience

Thursday, 3 November 2022 14:30 (30)

Presenter(s) : BONIVENTO, Walter (INFN Cagliari)

Session Classification : R&D Sessions

Contribution ID : 25

Type : **not specified**

SloMo R&D

Thursday, 3 November 2022 15:00 (30)

Presenter(s) : JACKSON, Christopher (Pacific Northwest National Laboratory)

Session Classification : R&D Sessions

Contribution ID : 26

Type : **not specified**

4D LArTPCs: combined charge and light readout

Friday, 4 November 2022 14:30 (30)

Presenter(s) : PARSA, Saba (University of Bern)

Session Classification : R&D Sessions

Contribution ID : 27

Type : **not specified**

ARAPUCA developments

Thursday, 3 November 2022 16:30 (30)

Presenter(s) : MACHADO, Ana (University of Campinas)

Session Classification : R&D Sessions

Contribution ID : 28

Type : **not specified**

Metalenses to increase light collection

Thursday, 3 November 2022 17:00 (30)

Presenter(s) : MARTIN-ALBO, Justo (IFIC)

Session Classification : R&D Sessions

Contribution ID : 29

Type : **not specified**

Q-Pix light readout design, simulation and prototyping

Thursday, 3 November 2022 17:30 (30)

Presenter(s) : GRAMELLINI, Elena (FNAL)

Session Classification : R&D Sessions

Contribution ID : **30**

Type : **not specified**

Xe-doped LArTPC neutrinoless double beta decay concept

Friday, 4 November 2022 09:30 (30)

Presenter(s) : ZENNAMO, Joseph (Fermilab)

Session Classification : Detector Concepts Sessions

Contribution ID : 31

Type : **not specified**

Theia concept

Friday, 4 November 2022 10:00 (30)

Presenter(s) : WURM, Michael (University of Mainz)

Session Classification : Detector Concepts Sessions

Contribution ID : **32**

Type : **not specified**

LiquidO concept

Friday, 4 November 2022 10:30 (30)

Presenter(s) : PALOMARES, Carmen (CIEMAT)

Session Classification : Detector Concepts Sessions

Contribution ID : **33**

Type : **not specified**

Water-based liquid scintillator developments

Friday, 4 November 2022 12:00 (30)

Presenter(s) : SVOBODA, Robert (University of California Davis)

Session Classification : R&D Sessions

Contribution ID : 34

Type : **not specified**

Technical developments towards Theia: a large-scale hybrid Cherenkov/scintillation detector

Friday, 4 November 2022 11:30 (30)

Presenter(s) : OREBI GANN, Gabriel (University of California Berkeley)

Session Classification : R&D Sessions

Contribution ID : 35

Type : **not specified**

Spectral photon sorting for neutrino detectors

Friday, 4 November 2022 12:30 (30)

Presenter(s) : KLEIN, Josh (University of Pennsylvania)

Session Classification : R&D Sessions

Contribution ID : 36

Type : **not specified**

Concluding remarks

Presenter(s) : BLUCHER, Edward (University of Chicago)

Session Classification : Closing Session

Contribution ID : 37

Type : **not specified**

Where do we go from here?

Friday, 4 November 2022 17:00 (30)

Presenter(s): BLUCHER, Edward (University of Chicago); SOLDNER-REMBOLD, Stefan (University of Manchester)

Session Classification : Closing Session

Contribution ID : 47

Type : **Oral presentation**

Public lecture (in Spanish): Benditos neutrinos

Wednesday, 2 November 2022 19:00 (90)

Presenter(s) : BARENBOIM, Gabriela (University of Valencia and IFIC)

Contribution ID : 48

Type : **not specified**

Reducing Electronic Noise in a Pixel-based LArTPC with a Pulsed-power Analog Front End

Wednesday, 2 November 2022 17:30 (30)

Presenter(s) : SHUTT, Thomas (Stanford University)

Session Classification : R&D Sessions

Contribution ID : 49

Type : **not specified**

External Radiological Backgrounds for the DUNE Experiment at Sanford Lab (REMOTE)

Thursday, 3 November 2022 15:30 (30)

Presenter(s) : REICHENBACHER, Juergen (South Dakota School of Mines & Technology)

Session Classification : R&D Sessions

Contribution ID : 50

Type : **not specified**

Cryogenic Resistive-WELL gaseous multiplier: towards a stable charge sensor in dual-phase TPCs

Friday, 4 November 2022 15:30 (30)

Presenter(s) : TESI, Andrea (Weizmann Institute of Science)

Session Classification : R&D Sessions

Contribution ID : 51

Type : **not specified**

Laser Wakefield Acceleration for Calibration Test Beam at DUNE FD (REMOTE)

Friday, 4 November 2022 16:00 (30)

Presenter(s) : MOONEY, Michael (Colorado State University)

Session Classification : R&D Sessions

Contribution ID : 52

Type : **not specified**

Welcome

Wednesday, 2 November 2022 09:50 (10)

Presenter(s) : GIL BOTELLA, Inés (CIEMAT)

Session Classification : Introduction and Context Sessions