# WORKSHOP: Multi-Aspect Young-ORiented Advanced Neutrino Academy (MAYORANA) - International Workshop

# Wednesday, 12 July 2023

### Oral contributions - Palazzo Grimaldi (09:10 - 10:50)

-Conveners: Alexei Smirnov

time [id] title	presenter
09:10 [29] Recent Results in the Theory of Lepton Number Violating Processes	IACHELLO, Francesco KOTILA, Jenni
10:00 [38] Nuclear muon capture: A perfect probe of the neutrinoless double beta decay	SUHONEN, Jouni
10:30 [14] A global approach in the 18O+48Ti reaction within the NUMEN project	Dr SGOUROS, Onoufrios

## Oral contributions - Palazzo Grimaldi (11:30 - 12:50)

-Conveners: Horst Lenske

time	[id] title	presenter
11:30	[25] The Search for Dark Matter with XENON	APRILE, Elena
	[46] Searching for Neutrinoless Double-Beta Decay with KamLAND-Zen and LEGEND	DETWILER, Jason
	[13] Calculation of the nuclear matrix elements and phase space factors for the double-beta decay of 104Ru	KAUPPINEN, Elina

#### Oral contributions - Palazzo Grimaldi (15:00 - 16:20)

-Conveners: Francesco Vissani

time	[id] title	presenter
15:00	[44] Nuclear response to weak interaction investigated by nuclear reactions	CARBONE, Diana
15:30	[31] Nuclear Double Charge Exchange Reactions by Isotensor Interactions	LENSKE, Horst
16:00	[24] Final Results from the PROSPECT-I Data Set: Spectrum and Oscillation Analyses	VENEGAS VARGAS, Diego

## Oral contributions - Palazzo Grimaldi (16:50 - 18:00)

-Conveners: Javier Menendez

time o Fiell title

time	[id] title	presenter
16:50	[30] Gamow-Teller Transitions: Probing Nuclear Structure and Weak Interactions	ITACO, Nunzio
17:20	[10] Characterization of low-energy argon recoils with the ReD experiment	Ms PINO, Noemi
17:40	[22] Improving CP Measurement with THEIA and Muon Decay at Rest	KONG, Chui-Fan

# Thursday, 13 July 2023

# Oral contributions - Palazzo Grimaldi (09:00 - 11:00)

#### -Conveners: Francesco Iachello

time	[id] title	presenter
	[41] Electron antineutrino scattering on protons: history, applications, and theoretical estimates	VISSANI, Francesco
09:30	[47] Fundamental Physics with Nuclei	PASTORE, saori
	[23] {\it Ab initio} calculation of the \$^6\$He \$\beta\$-decay spectrum for new physics searches	KING, Garrett
	[11] Study of the 20Ne + 130Te system in a multi-channel approach within the NUMEN project	Dr SOUKERAS, Vasileios
10:40	[9] One nucleon transfer	GARCIA TECOCOATZI, Hugo

## Oral contributions - Palazzo Grimaldi (11:30 - 13:20)

# -Conveners: Manfred Lindner

time [id] title	presenter
11:30 [28] ICARUS at the Fermilab Short-Baseline Neutrino program	GUGLIELMI, Alberto
12:00 [34] RES-NOVA: detecting astrophysical neutrinos with cryogenic detectors	S Dr PATTAVINA, Luca
12:30 [40] Experimental challenges in the detection of heavy ions at high rate with the NUMEN project	hin TORRESI, Domenico
13:00 [20] Selecting the proper substrate for targets in NUMEN Experiment	GIOVANNINI, Mauro

### Oral contributions - Palazzo Grimaldi (15:00 - 16:30)

#### -Conveners: Gioacchino Ranucci

time [id] title	presenter
15:00 [36] Neutrino masses, oscillations and neutrinoless double-beta decay	SIMKOVIC, Fedor
15:30 [37] New studies on neutrino oscillations	SMIRNOV, Alexei
16:00 [32] Status and perspectives of coherent neutrino scattering	Prof. LINDNER, Manfred

# Oral contributions - Palazzo Grimaldi (17:00 - 18:10)

#### -Conveners: Paschal Coyle

time [id] title		presenter
17:00 [35] Status of the	JUNO experiment and its physics perspectives	RANUCCI, Gioacchino
17:30 [19] Symmetries even-even nuclei	of the IBFFM and transfer reactions between odd-odd and i by using IBFFM	SANTOPINTO, Elena
17:50 [18] JUNO detect	tor sensitivity to 7Be, pep and CNO solar neutrinos	BERETTA, Marco

# **Friday, 14 July 2023**

## Oral contributions - Palazzo Grimaldi (09:30 - 11:10)

#### -Conveners: Jouni Suhonen

time	[id] title	presenter
	[33] Neutrinoless double-beta decay matrix elements from systematic calculations guided by exp. data	MENENDEZ, Javier
	[27] Some experimental thoughts about the double-gamma decay process and its links with 2b0v	VALIENTE DOBON, Jose' Javier
10:30	[6] Inferring astrophysical neutrino sources from the Glashow resonance	VOLMER, Nele
10:50	[15] Latest Results from the CUORE Experiment	BENATO, Giovanni

## Oral contributions - Palazzo Grimaldi (11:30 - 13:00)

#### -Conveners: Fedor Simkovic

time [id] title	presenter
11:30 [26] Status of KM3NET	COYLE, Paschal
12:00 [48] Science and status of the DUNE experiment	PATRIZII, Laura
12:30 [42] Search for ultra-high energy neutrinos in the Pierre Auger Observatory	GORA, Dariusz

## Oral contributions - Palazzo Grimaldi (15:00 - 16:40)

#### -Conveners: Laura Patrizii

time [id] title	presenter
15:00 [39] Revealing the Neutrino Sky: a decade of IceCube's observations	TOSCANO, Simona
15:30 [49] Supernovae as factories of neutrinos and other feebly interacting particles	CARENZA, Pierluca
16:00 [12] Theoretical modelling of Heavy Ion Double Charge Exchange reactions and calculations for the NUMEN project	BELLONE, Jessica
16:20 [50] Neutrinos @ INFN: a leap inside the Commissione Scientifica Nazionale 2	RICCOBENE, Giorgio