

Scientific Program of NOW 2016



NEUTRINO OSCILLATION WORKSHOP
OTRANTO (LECCE, ITALY)
SEPTEMBER 4-11, 2016

Sunday 4
Arrival and Registration

Monday 5
Morning:

Session I (plenary): Oscillation parameters: Present Chair: Takaaki Kajita		
Time	Speaker	Title
8.30 - 8.40	Gianluigi Fogli	Welcome to NOW 2016
8.40 - 9.15	Yusuke Koshio	Solar and atmospheric neutrino oscillations in Super-Kamiokande
9.15 - 9.50	Seon-Hee Seo	Short-baseline reactor neutrino oscillations
coffee break (25')		
10.15 - 10.50	Lorenzo Magaletti	T2K oscillation results
10.50 - 11.25	Jeff Hartnell	NOvA oscillation results
11.25 - 12.00	Ferruccio Feruglio	What are the neutrino mass-mixing parameters telling us?

Afternoon:

Session I (parallel) Oscillation parameters: Present Conveners: Camillo Mariani and Mariam Tortola			Session V (parallel) Particle physics in the Cosmos Conveners: Davide Franco and Ninetta Saviano		
Time	Speaker	Title	Time	Speaker	Title
16.00 - 16.25	Viktor Pec	Daya Bay results	16.00 - 16.25	Stefano Gariazzo	Light steriles with pseudoscalar interaction Cosmology
16.25 - 16.50	Christian Buck	Double Chooz results	16.25 - 16.50	Francesco Forastieri	Planck constraints on secret neutrino interactions
16.50 - 17.15	Daniel Dwyer	Estimation of reactor neutrino fluxes	16.50 - 17.15	Sergio Pastor	The effective number of ν 's: standard and non-standard
coffee break (25')					
17.40 - 18.05	Juan Nieves	QE-like scattering and neutrino energy reconstruction	17.40 - 18.05	Davide D'Angelo	SABRE
18.05 - 18.30	Giuliana Galati	OPERA	18.05 - 18.30	Bianca Bottino	Dark Side
18.30 - 18.55	Benoît Guillon	SOLID results	18.30 - 18.55	Shun Zhou	Singly-charged Higgs Boson and UHE Cosmic neutrinos
Special Plenary Talk					
Time	Speaker		Title		
18.55 - 19.30	Andrea Carlino		Tarantism: zooming out and zooming in on a local phenomenon		

Tuesday 6
Morning:

Session II (plenary): Oscillation parameters: Future
Chair: Lucia Votano

Time	Speaker	Title
8.40 – 9.15	Takaaki Kajita	Prospects for neutrino oscillation physics at HK/T2HK
9.15 - 9.50	Aart Heijboer	Prospects for ν mass spectrum discrimination under water (and ice)
coffee break (25')		
10.15 - 10.50	Alberto Garfagnini	Future precision oscillometry with reactor neutrinos
10.50 - 11.25	Dorota Stefan	Neutrino oscillation physics at DUNE
11.25 - 12.00	Patrick Huber	Prospects for neutrino oscillation parameters

Afternoon:
(note early beginning of sessions)

Session II (parallel) Oscillation parameters: Future Conveners: Georgia Karagiorgi and Lucio Ludovici			Session III (parallel) Multimessenger astrophysics Conveners: Francesco Salamida and Irene Tamborra		
Time	Speaker	Title	Time	Speaker	Title
15.00 – 15.25	Pedro Simoni Pasquini	CPV and nonunitary mixing in T2K and T2HK	15.00 – 15.25	Martina Gerbino	The hunt for neutrino hierarchy
15.25 – 15.50	Arsenii Titov	CPV Predictions from Flavour Symmetries	15.25 – 15.50	Yufeng Li	Supernova neutrinos in future LS detector
15.50 – 16.15	Artur Ankowski	Understanding nu cross sections for future oscil. experiments	15.50 – 16.15	Franco Vazza	Theo/expt constraints on extragalactic magnetic fields
16.15 – 16.40	Osamu Yasuda	NSI at Hyper-Kamiokande	16.15 – 16.40	Armando Di Matteo	Cosmo ν 's, γ 's & redshift evolution of UHECR sources
16.40 – 17.05	Sampsa Vihonen	Optimizing the θ_{23} octant search in LBL expts	16.40 – 17.05	Julia Tjus	(Extra)galactic sources and the IceCube HE nu signal

Walking Excursion to Otranto (17:30 - 20:00)
Dinner with typical Salento products (20:30)

Wednesday 7
Morning:

Session III (plenary): Multimessenger astrophysics Chair: Georg Raffelt		
Time	Speaker	Title
8.40 - 9.15	Thomas Dent	The Sound of Gravity
9.15 - 9.50	Joanna Kyrlyuk	IceCube and HE neutrinos
coffee break (25')		
10.15 - 10.50	Felicia Krauss	The Fermi Sky in a Multimessenger Context
10.50 - 11.25	Eun-Suk Seo	Charged cosmic rays
11.25 - 12.00	Nicolao Fornengo	Multimessenger astrophysics

Afternoon:

Session III (parallel) Multimessenger astrophysics Conveners: Francesco Salamida and Irene Tamborra			Session I (parallel) Oscillation parameters: Present Conveners: Camillo Mariani and Mariam Tortola		
Time	Speaker	Title	Time	Speaker	Title
16.00 – 16.25	Todor Stanev	Calculations of ultra high energy atmospheric neutrinos	16.00 – 16.25	Aldo Serenelli	Solar models and neutrinos: what's new under the Sun?
16.25 – 16.50	Zurab Berezhiani	HE cosmic neutrinos from DM decay	16.25 – 16.50	Sandra Zavatarelli	Recent solar and geo nu results from Borexino
16.50 – 17.15	Francesco Villante	Discussion of IceCube High Energy neutrino events	16.50 – 17.15	Andrew Furmanski	Recent MicroBooNE results
coffee break (25')					
17.40 – 18.05	Annarita Margiotta	Recent results of the ANTARES detector	17.40 – 18.05	Francesco Capozzi	Status of three-neutrino mixing
18.05 – 18.30	Giorgio Riccobene	Status and development of KM3Net/ARCA	18.05 – 18.30	David Vanegas Forero	(Non)standard oscillations at current facilities
18.30 – 18.55	Dario Grasso	Unconventional CR propagation in gamma and nu astronomy	18.30 – 18.55	Hong-Jian He	Leptonic unitarity triangle, nu oscillations and CPV
18.55 – 19.20	Jaime Alvarez-Muniz	UHE multimessengers at the Pierre Auger Observatory	18.55 – 19.20	Omar Miranda	Nonunitary mixing: current constraints and new ambiguity

Social event (after dinner)

Thursday 8
Full day excursion
Light dinner (21:00)

Friday 9
Morning:

Session IV (plenary): Neutrino masses, states and interactions Chair: Ettore Fiorini		
Time	Speaker	Title
8.40 - 9.15	Matteo Biassoni	Review of neutrinoless double beta decay experiments
9.15 - 9.50	Loredana Gastaldo	Review of direct neutrino mass searches
coffee break (25')		
10.15 - 10.50	Gioacchino Ranucci	SOX and light sterile neutrinos
10.50 - 11.25	Giovanni De Lellis	Physics program with SHiP
11.25 - 12.00	Frank Deppisch	LHC, new physics and neutrinos

Afternoon:

Session IV (parallel) Neutrino masses, states and interactions Conveners: Susanne Mertens and Stefano Morisi			Session II (parallel) Oscillation parameters: Future Conveners: Georgia Karagiorgi and Lucio Ludovici		
Time	Speaker	Title	Time	Speaker	Title
16.00 – 16.25	Angela Papa	MEG and LVF	16.00 – 16.25	Carlo Giunti	Sterile ν mixing now and in the next 10+ years
16.25 – 16.50	Guido Drexlin	KATRIN	16.25 – 16.50	Karin Gilje	Sterile at reactors: PROSPECT
16.50 – 17.15	Thierry Lasserre	Laboratory searches for keV sterile neutrinos	16.50 – 17.15	Luis Manzanillas	Sterile at reactors: STEREO
coffee break (25')					
17.40 – 18.05	Davide Meloni	GUT and neutrinos	17.40 – 18.05	Gianluca Raselli	Sterile searches with Liquid Argon at FNAL
18.05 – 18.30	Patrick Ludl	Exotic charged current interactions in tritium beta decay	18.05 – 18.30	Andrea Longhin	High precision flux measurements in conventional nu beam
18.30 – 18.55	Jacobo Lopez Pavon	See-saw, non universality and LVF	18.30 – 18.55	Paola Sala	The CERN neutrino platform
18.55 – 19.20	Alexander Studenikin	Neutrino electromagnetic interactions	18.55 – 19.20	Elena Wildner	Physics at ESS and the upgrades needed for the ESSnuSB

Social dinner

Saturday 10
Morning:

Session V (plenary): Particle physics in the Cosmos
Chair: Alessandro Bettini

Time	Speaker	Title
8.40 - 9.15	Massimiliano Lattanzi	Neutrino Cosmology: Current Results
9.15 - 9.50	Alessandro Melchiorri	Future precision cosmology and neutrinos
coffee break (25')		
10.15 - 10.50	Marcello Messina	Status of WIMP Dark Matter searches
10.50 - 11.25	Andreas Ringwald	Alternative dark matter candidates
11.25 - 12.00	Alexander Merle	keV sterile neutrino dark matter

Afternoon:

Session V (parallel) Particle physics in the Cosmos Conveners: Davide Franco and Ninetta Saviano			Session IV (parallel) Neutrino masses, states and interactions Conveners: Susanne Mertens and Stefano Morisi		
Time	Speaker	Title	Time	Speaker	Title
16.00 – 16.25	Eleonora Di Valentino	Thermal axion cosmology and inflationary freedom	16.00 – 16.25	Gonzalo Martinez Lema	NEXT
16.25 – 16.50	Marco Chianese	Dark Matter scenarios at IceCube	16.25 – 16.50	Marco Vignati	The CUORE and CUORE-o experiments
16.50 – 17.15	Giuliana Fiorillo	Directionality in DM search	16.50 – 17.15	Valerio D'Andrea	GERDA
coffee break (25')					
17.40 – 18.05	Alfredo Cocco	PTOLEMY	17.40 – 18.05	Elena Sala	AMoRE
18.05 – 18.30	Aurel Schneider	keV sterile neutrino and structure formation	18.05 – 18.30	Fedor Simkovic	Neutrinoless DBD mechanisms and NME
18.30 – 18.55	Kalliopi Petraki	Bound states in dark matter phenomenology	18.30 – 18.55	Clementina Agodi	NUMEN
Concluding Talk					
Time	Speaker	Title			
18.55 – 19.30	Christian Spiering	Prospects for Neutrino and Astroparticle Physics			
	NOW 2016 L.O.C.	Acknowledgments			

Sunday 11
Departures