Welcome to NOW 2016!
A brief historical note on NOW

- This is the ninth edition of the NOW Conference series

- In order to trace the origin of NOW, we have to go back to the '98 in Takayama ....
At the “Neutrino ’98”, in Takayama, on behalf of the SuperKamiokande Collaboration, a young physicist Takaaki Kajita shows the first clear evidence of neutrino oscillations in atmospheric neutrinos!

Nobel prize in 2015!

It is just at Takayama that a group of European physicists decide to organize in Europe, three months later, a topical workshop on “Neutrino Oscillations”, NOW!
The first edition has been held in Amsterdam (NIKHEF, 1998)

What remains (to my knowledge) of the first edition ...

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High Energy Physics - Phenomenology

Summary of the NOW'98 Phenomenology Working Group

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Which authors of this paper are endorsers?
The second edition (2000) has been organized in Conca Specchiulla, with the typical structure of a conference ...

The third edition (2004) has been presented as an adventurous trip around known and unknown lands of the neutrino world...

The fourth edition (2006) has been introduced through an armillary sphere, whose “armillae” were called to represent different regions of a “neutrino-centered” system ...

In 2007 a reason of pride for NOW ...

Major Conference Series

1. Accelerators
2. Computing, Instruments and Detectors
3. Hadrons and Nuclei
4. HEP (general)
5. Neutrinos
6. Relativity, Cosmology and Astrophysics

- Neutrinos
  - Neutrino
  - Neutrino Telescopes
  - NOON
  - **NOW**
  - NuFact
  - NuInt
  - WIN
For the fifth edition (2008) we have chosen as theme the five Platonic solids, by relating them to different sectors of the neutrino physics ...

For the sixth edition (2010) the theme has been inspired by the Tree of Life, the mosaic of the Otranto Cathedral ...

The poster of the seventh edition (2012) was inspired to the Rose Window of the Otranto Cathedral, re-interpreted as a Neutrino Rose Window ...

The theme of the last edition (2014) was inspired to an ancient apulian calyx krater, situated in the Sully wing of the Louvre Museum.

The poster of this edition of NOW is inspired to a XVIII century view of Otranto, with its harbour and its Aragon Castle. Some other elements are added with the intent of indicating the five workshop sessions.
First Session
Second Session
Third Session
Fourth Session
Fifth Session
An interesting Question

Who is the author of the drawing of the view of Otranto (and of all the posters of the previous editions)?

Eligio Lisi!

... going to the “heraldic symbol” of Otranto ...
A quick look to the NOW program
First Session

“Oscillation parameters: present”

Conveners: Camillo Mariani
Mariam Tortola

- Solar and atmospheric neutrino oscillations in SuperKamiokande
  Yusuke Koshio
- Short-baseline reactor neutrino oscillations
  Seon-Hee Seo
- T2K oscillation results
  Lorenzo Magaletti
- NovA oscillation results
  Jeff Hartnell
- What are the neutrino mass-mixing parameters telling us?
  Ferruccio Feruglio
Second Session

“Oscillations parameters: future”

Conveners: Georgia Karagiorgi, Lucio Ludovici

- Prospects for neutrino oscillation physics at HK/T2HK
  Takaaki Kajita

- Prospects for nu mass spectrum discrimination under water
  Aart Heijboer

- Future precision oscillometry with reactor neutrinos
  Alberto Garfagnini

- Neutrino oscillation physics at DUNE
  Dorota Stefan

- Prospects for neutrino oscillation parameters
  Patrick Huber
Third Session

“Multimessenger astrophysics”

Conveners: Francesco Salamida, Irene Tamborra

- The sound of Gravity
  - Thomas Dent
- IceCube and HE neutrinos
  - Joanna Kiryluk
- The Fermi sky in a multimessenger context
  - Felicia Krauss
- Charge cosmic rays
  - Eun-Suk Seo
- Multimessenger astrophysics
  - Nicolao Fornengo
Fourth Session

“Neutrino masses, states and interactions”

Conveners:  
Susanne Mertens  
Stefano Morisi

- Review of neutrinoless double beta decay experiments  
  Matteo Biassoni
- Review of direct neutrino mass searches  
  Loredana Gastaldo
- SOX and light sterile neutrinos  
  Gioacchino Ranucci
- Physics program with SHiP  
  Giovanni De Lellis
- LHC, new physics and neutrinos  
  Frank Deppish
Fifth Session

“Particle physics in the Cosmos”

Conveners: { Davide Franco  
               Ninetta Saviano  
               Massimiliano Lattanzi  
               Alessandro Melchiorri  
               Marcello Messina  
               Andreas Ringwald  
               Alexander Merle  

- Neutrino cosmology: current results
- Future precision cosmology and neutrinos
- Status of WIMP dark matter searches
- Alternative dark matter candidates
- keV sterile neutrino dark matter
Concluding Talk

Prospects for neutrino and astroparticle physics

by

Christian Spiering
A Special Talk

This evening a special plenary session has been devoted to a very interesting subject:

Andrea Carlino

“Tarantism: zooming out and zooming in on a local phenomenon”

followed Wednesday 7th evening by a related

Social Event

PIZZICA!

A popular Italian folk dance typical of the Salento peninsula
The excursions
Walking excursions downtown Otranto
(afternoon September 6th)

In particular visit to

- The old fortress.
- The Aragon Castle, reinforced by Frederick II.
- The Cathedral, with its fantastic mosaic and its rose window.
- The church of S. Pietro, with its byzantine frescoes.
Full Day Excursions (September 8th)

There are two alternatives

- North Tour: visit of Lecce, Ostuni, Valle d’Itria, Martina Franca (Locorotondo).

- South Coast Tour (until S. Maria di Leuca) and visit of the Church of Santa Caterina d’Alessandria in Galatina.

Make your choice and write your name in the corresponding list at the secretariat today.
Lecce

A few images of what you can see in Lecce, the baroque capital of the South of Italy ...
Ostuni (the White Town)

A few images of Ostuni ...

The cathedral of Ostuni

Panoramic view of Ostuni

Ostuni by night
North Tour

- Otranto
- Lecce
- Ostuni

lunch at Masseria Parco di Castro

- Martina Franca
Martina Franca: the Capital of the Valle d’Itria

The town has a particularly beautiful old town surrounded by stone walls with prominent Baroque gates leading to piazzas and narrow, winding streets.
South Tour

Down along the coastline until the farthest end of Apulia

- Otranto
- Porto Badisco
- S. Cesarea Terme
- Castro
- Tricase
- S. Maria di Leuca
South Tour

Down along the coastline until the farthest end of Apulia

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- Tricase
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Then back through inland towns, in particular visit of

- Galatina

After the lunch at Masseria Le Stanzie (Cutrofiano)
In Galatina, visit of the church of Santa Caterina d’Alessandria (14th century)

Santa Caterina d’Alessandria is a late Romanesque church built in 1390 by Raimondello del Balzo Orsini, count of Soleto, with a fine portal and rose-window.

The interior contains frescoes by Francesco d’Arezzo (1435).

The apse contains the fine mausoleum of the son of the founder.
Free time in Otranto
Free time/1

Between plenary and parallel sessions you have about 4 hours of free time. You can

1

Use the Basiliani Resort facilities: the Outdoor Pool and Solarium (free) or the Indoor SPA services (charged). The Outdoor Pool is open and guarded during 10:00-18:00.

Outdoor structure

Indoor structure
Free time/2

You can walk downhill to Otranto (to reach town or beaches, ~ 20’ walk).

Twelve beach umbrellas (+ chairs/beds) have been reserved at Lido Miramare for NOW participants: access from the stairs of Ristorante Miramare, by showing the badge.

If you plan to skip lunch at the restaurant and stay outside all the time, you can take away a lunch box, provided that you book it not later than 9:00 during breakfast, by signing on the list at the entrance of the restaurant. The booked lunch boxes will be distributed around 12:30.
Free time/3

Alternative to walking: hire an “Ape Calessino”

a three-tires vehicle, used for cheap taxi service, transporting up to 3-4 people in the local area.

Only today (Monday 5\textsuperscript{th}) we offer free transportation for 16 people with 1 Ape Calessino + 1 car + 1 minibus from Basiliani to the stop nearest to Lido Miramare (at 13:00) and back from the stop near Lido Miramare to Basiliani (at 15:00). Please give priority to families with children.

To hire an Ape Calessino, you may ask help to the Hotel Reception or the NOW Secretariat. Note: ride price can be paid by cash only.
We hope you will enjoy
our Workshop, our Land and our Sea!