



XII International Workshop on “Neutrino Telescopes”

Twenty years after the Supernova 1987A neutrino bursts discovery

March 6-9, 2007

“Istituto Veneto di Scienze, Lettere ed Arti”, Palazzo Franchetti - Campo S. Stefano
Venice

Programme

Twenty years after the Supernova 1987A neutrino bursts discovery

Tuesday, March 6, 2007

09.30-09.45 **M. Baldo Ceolin** (University of Padova)
Welcome

“SUPERNOVAE”

“Great Moments”

Chair: G. Zatsepin (INR of RAS, Moscow)

09.45-10.15 **A. Suzuki** (KEK)
The Discovery of SN1987A Neutrino Bursts

10.15-10.45 **G.M. Fuller** (University of California, San Diego)
The Neutrino Supernova Discovery Implications for Astrophysics and Cosmology

10.45-11.15 **Coffee Break**

“Supernovae and Cosmology”

Chair: S. Matarrese (University of Padova)

11.15-11.45 **P. Astier** (IN2P3/CNRS & University of Paris VI et VII)(n.c.)
Supernovae and Dark Energy

11.45-12.15 **E.W. Kolb** (University of Chicago)
Lambda-CDM: Beyond the Standard Model

Chair: M. Signore (Observatoire de Paris, LERMA)

12.15-12.45 **J.F. Beacom** (Ohio State University)
Direct Measurement of Supernova Neutrino Emission Parameters

12.45-13.00 **G. Pizzella** (LNF)
SN1987A Revisited after 20 Years: May the Supernova bang more than once?

13.00-14.30 **Lunch**

“Astrophysics”

Chair: T. Stanev (University of Delaware)

14.30-15.00 **F. Halzen** (University of Wisconsin, Madison)
Cosmic Neutrino Telescopes

15.00-15.30 **P. De Bernardis** (University of Roma “La Sapienza”)
Cosmic Microwave Background Observations

15.30-16.00 **G. Navarra** (University of Torino)
Hunting for Cosmic Particles

16.00-16.30 **Coffee Break**

“Solar Neutrinos”

Chair: V. Gavrin (INR of RAS, Moscow)

16.30-17.00 **C. Peña-Garay** (University of Valencia)
Neutrinos a Unique Window to Other Ways Inaccessible Physics: The Standard Solar Model

17.00-17.20 **C. Brogгинi** (INFN, Padova)
LUNA: New Results on $^3\text{He} + ^4\text{He}$

17.20-17.40 **G.P. Bellini** (University of Milano)
BOREXINO

“New Telescopes”

Chair: L. Resvanis (Nestor Institute, Pilos)

17.40-18.05 **E. Blaufuss** (University of Maryland)
Neutrino Physics with IceCube

18.05-18.30 **G. Miele** (University of Napoli)
Ultra High Energy Neutrinos in the Mediterranean: detecting ν_τ and ν_μ with a km^3 Telescope

“New Results”

Chair: O. Saavedra (University of Torino)

18.30-18.55 **J. Rico** (Institut de Fisica d’Altes Energies, Barcelona)
First Results of Galactic Observation with MAGIC

18.55-19.20 **P. Picozza** (University of Roma “Tor Vergata”)
PAMELA: An Experiment for Antiparticles Measurement in Cosmic Rays

20.00-22.00 **“Pasta e Fasjoi”**

Wednesday, March 7, 2007

“THE STANDARD MODEL AND BEYOND”

“Neutrino Properties”

Chair: A. Bottino (University of Torino)

- 08.30-09.00 **G. Fogli** (University of Bari)
Neutrino Mass-Mixing Parameters and Implications for Beta and Neutrinoless Double Beta Decay Searches
- 09.00-09.30 **G. Altarelli** (University of Roma Tre)
Theory of Neutrino Masses and Mixing

“Neutrino CP Violation”

Chair: K. Kleinknecht (University of Mainz)

- 09.30-10.00 **N. Cabibbo** (University of Roma “La Sapienza”)
Do Neutrinos violate CP?
- 10.00-10.30 **H. Minakata** (Tokyo Metropolitan University)
Measuring Matter Density and Testing MSW
- 10.30-11.00 **Coffee Break**

“Measuring θ_{13} at Accelerators and Reactors”

Chair: H. White (LANL)

- 11.00-11.30 **M. Goodman** (ANL)
Searching for the Neutrino Mixing Angle θ_{13} at Reactors
- 11.30-12.00 **K. Nishikawa** (Kyoto University)
Status of the T2K Experiment at J-Park

Chair: U. Dore (INFN, Roma “La Sapienza”)

- 12.00-12.30 **T. Kajita** (University of Tokyo)
T2KK; What is New?
- 12.30-13.00 **K. Lang** (The University of Texas at Austin)
NOVA and θ_{13}
- 13.00-14.30 **Lunch**

Chair: V. Matveev (INR of RAS, Moscow)

14.30-15.00 **J.G. Learned** (Hawaii University)
Measuring θ_{13} with a Remote Detector of Reactor Antineutrinos

15.00-15.30 **M. Mezzetto** (INFN, Padova)
European Neutrino Programmes Accelerator- and Reactor-based

Chair: P.O. Hulth (Stockholm University)

15.30-15.55 **Y. Farzan** (IPM, Teheran)
Leptonic CP Violation: Zero, Maximal or between the Two Extremes

15.55-16.20 **T. Schwetz-Mangold** (CERN)
What is the Probability that θ_{13} and CP Violation will be discovered in the Future Neutrino Oscillation Experiments?

16.20-16.45 **W. Rodejohann** (MPI, Heidelberg)
Broken μ - τ Symmetry and CP Violation

16.45-17.15 **Coffee Break**

“Neutrino results”

Chair: G. Wilquet (Université Libre, Bruxelles)

17.15-17.45 **J. Panman** (CERN)
New HARP Results

17.45-18.15 **P. Vahle** (University College of London)
MINOS Results after Two Years Running

Chair: J. Schneps (Tufts University)

18.15-18.45 **M.T. Muciaccia** (University of Bari)
First Events from the CNGS Neutrino Beam Detected in the OPERA Experiment

18.45-19.15 **M. Shaevitz** (Columbia University)
MiniBooNE Oscillation Update

19.30-20.30 **“Visit to the Portrait Collection”**

Thursday, March 8, 2007

“BEYOND THE STANDARD MODEL”

08.45-09.00 Emilio Zavattini Memorial (Nicola Cabibbo)

“PVLAS”

09.00-09.30 **G. Zavattini** (University of Ferrara)
PVLAS

09.30-10.00 **M. Roncadelli** (University of Pavia)
Theoretical Aspects

Chair: C. de los Heros (Uppsala University)

10.00-10.30 **A. Ringwald** (DESY)
Particle Interpretations of the PVLAS Data

10.30-11.00 **A. Mirizzi** (University of Bari)
Cosmological Bounds on Axions

11.00-11.30 **Coffee Break**

“Majorana”

Chair: P. Minkowski (University of Bern)

11.30-12.00 **M. Yoshimura** (Okoyama University)
Toward Majorana Neutrino Spectroscopy

12.00-12.30 **N. Sasao** (University of Kyoto)
CP-even Neutrino Beam

12.30-13.00 **E. Fiorini** (University of Milano “Bicocca”)
Double β Decay and Majorana Neutrinos

13.00-14.30 **Lunch**

“Sterile neutrinos”

Chair: A. Guglielmi (INFN, Padova)

- 14.30-15.00 **S. Pakvasa** (University of Hawaii)
Non Standard Oscillation Models
- 15.00-15.30 **R.S. Raghavan** (Virginia Polytechnic Inst. & State University, Blacksburg)
Probing Active to Sterile Neutrino Oscillations in the LENS Detector
- 15.30-16.00 **A. Melchiorri** (University of Roma “La Sapienza”)
Is Cosmology Compatible with Sterile Neutrinos?
- 16.00-16.30 **Coffee Break**

“Lepton Flavour Physics”

Chair: F. Vannucci (APC, University of Paris 7)

- 16.30-17.00 **A. Rossi** (University of Padova)
Lepton Flavour Violation in Neutrino Seesaw Scenarios
- 17.00-17.30 **C. Bemporad** (University of Pisa)
The MEG Experiment at PSI

Chair: E. Lisi (INFN, Bari)

- 17.30-18.00 **S. Davidson** (University of Lyon-I)
On the Impact of Flavour in Leptogenesis
- 18.00-18.30 **S.T. Petcov** (SISSA)
Low-Energy Leptonic CP-Violation and Leptogenesis
- 20.00-22.30 **“Conference Dinner at the Hotel Cipriani, Isola della Giudecca”**

Friday, March 9, 2007

“Looking forward”

Chair: D. Haidt (DESY)

09.00-09.30 **L. Maiani** (University of Roma “La Sapienza”)
Experiments and Theory with the LHC: a Personal View

09.30-10.00 **A. Romanino** (SISSA)
LHC and Neutrino Physics

Chair: J.J. Aubert (CPPM, Marseille)

10.00-10.30 **G. Senjanovic** (ICTP, Trieste)
See-saw at LHC

10.30-11.00 **M.E. Shaposhnikov** (IPT, Lausanne)
Where to find a Dark Matter Sterile Neutrino?

11.00-11.30 **Coffee Break**

“New Horizons”

Chair: F. Ronga (LNF)

11.30-12.00 **A. McDonald** (Queen’s University, Kingston)
SNO and the New SNOLAB

12.00-12.30 **E. Coccia** (LNGS)
Gran Sasso Future Programmes

12.30-13.00 **B. Sadoulet** (University of California, Berkeley)
The DUSEL Project in the US

13.00-14.30 **Lunch**

“Going on”

Chair: G. Costa (University of Padova)

14.30-15.00 **R.N. Mohapatra** (University of Maryland)
Unified TeV Scale Picture of Baryogenesis and Dark Matter

15.00-15.30 **A. Masiero** (University of Padova)
Physics of Neutrino Flavours

Chair: E. Iarocci (LNF)

- 15.30-16.00 **P. Binetruy** (APC, Paris)
The Incredible Progresses of Particle Physics and Cosmology
- 16.00-16.30 **Coffee Break**
- 17.00 **“Recital for soprano and lute”**
- 18.00 **“Farewell Party”**