

PROGRAMME

Tuesday, February 22, 1994

9.20 *Welcome Address*

IN HONOUR OF B. PONTECORVO, G. OCCHIALINI and B. ROSSI

Chairman: **R.A. Ricci** (Univ. of Padua)

9.30 **G. Salvini** (Univ. of Rome)
Bruno Pontecorvo Legacy

9.50 **S. Bilenky** (Univ. of Turin & JINR, Dubna)
Bruno Pontecorvo and Neutrinos

10.10 **L. Scarsi** (Univ. of Palermo)
Bruno Rossi and Giuseppe Occhialini

10.40 **C o f f e e B r e a k**

NEUTRINO PHYSICS AND ASTROPHYSICS

Chairman: **G. Salvini** (Univ. of Rome)

11.10 **G. Altarelli** (CERN)
Neutrino Masses: Theoretical Implications

11.45 **J. Ellis** (CERN)
Cosmology and Neutrino Physics

12.25 **A. Zichichi** (CERN)
Supersymmetry and Neutrino Telescopes

13.00 **L u n c h**

DARK MATTER

Chairman: **M. Cribier** (CEN, Saclay)

14.30 **A. Masiero** (INFN, Padova)
Dark Matter Particles

15.00 **L. Moscoso** (CEN, Saclay)
Results from Experiments on Baryonic Dark Matter

15.30 **J. Trümper** (Max-Planck-Institut)
Dark Matter in Galaxies and Cluster of Galaxies

- 16.00 **E. Roulet** (CERN)
Is the Halo Responsible for the Microlensing Event?
- 16.15 **A. Bottino** (Univ. of Turin)
Neutralinos as Dark Matter
- 16.45 **N. Spooner** (Univ. of Oxford)
Searches for Particle Dark Matter: Progress, Future Prospects and Ideas

17.15 **C o f f e e B r e a k**

SOLAR NEUTRINO EXPERIMENTS

Chairman: **G.T. Zatsepin** (INR, Moscow)

- 17.40 **R. Davis** (Univ. of Pennsylvania)
Solar Neutrinos in Homestake Experiment
- 18.00 **Y. Suzuki** (Univ. of Tokyo)
Kamiokande Results and Prospects
- 18.20 **V.N. Gavrin** (INR, Moscow)
Results from SAGE
- 18.40 **C. Cattadori** (Univ. of Milan)
Results from GALLEX
- 19.00 **M. Giammarchi** (INFN, Milan)
The Counting Test Facility of the Borexino Experiment at LNGS

19.15 **E n d o f t h e S e s s i o n**

20.30 **“Buffet with old Venitian popular Songs”**

Wednesday, February 23, 1994

SOLAR NEUTRINOS

Chairman: **V.A. Matveev** (INR, Moscow)

9.00 **V.S. Berezinsky** (INR, Moscow & Gran Sasso Lab)
On Astrophysical Solutions of Solar Neutrino Problem

9.40 **S.P. Rosen** (Texas Univ.)
Solar Neutrinos: what we expect from the Future Experiments

10.20 **H. B. Mak** (Queen's Univ.)
Searches for Solar Neutrinos: Progress and Future Ideas

11.00 **C o f f e e B r e a k**

SOLAR NEUTRINOS

Chairman: **T. Kirsten** (MPI, Heidelberg)

11.30 **S.T. Petcov** (SISSA & Bulgarian Academy of Sciences, Sofia)
New Constraints on the Vacuum Oscillation Solution of the Solar Neutrino Problem

11.45 **E. Akhmedov** (Kurchatov Inst., Moscow & Univ. of Valencia)
On the Neutrino Magnetic Moment Solution of the Solar Neutrino Problem

12.00 **C. Giunti** (INFN, Turin)
Future Solar Neutrino Experiments and Neutrino Spin-Flavour Precession

12.15 **A. Dar** (Technion-Israel Institute of Technology, Haifa)
Standard Physics Solution to the Solar Neutrino Problem

12.30 **U. de Angelis** (Univ. of Naples & RAL)
Radiative Transport in the Solar Interior and the Solar Neutrino Problem

12.45 **E. Gavryuseva** (INR, Moscow & Observatory of Arcetri)
Time to control Solar Breathing Modes

13.00 **L u n c h**

NEUTRINO PROPERTIES

Chairman: **M. Gourdin** (Univ. Pierre et Marie Curie, Paris)

14.30 **A. Smirnov** (INR, Moscow & I.C.T.P., Trieste)
Neutrino Properties

15.05 **R.N. Mohapatra** (Univ. of Maryland)
Hints of Grand Unification from Neutrino Data

15.40 **G. Steigman** (Ohio State Univ.)
Neutrino Masses and Nucleosynthesis

16.15 **D. Grasso** (INFN, Rome)
Non Zero τ Neutrino Magnetic Moment and Nucleosynthesis

16.30 **C o f f e e B r e a k**
NEUTRINO MASSES

Chairman: **K. Kleinknecht** (Univ. of Mainz)

17.00 **A. Morales** (Univ. of Zaragoza)
Double Beta Decay and Neutrino Masses

17.30 **G.L. Fogli** (Univ. of Bari)
*Solar, Atmospheric, Accelerator and Reactor Neutrino Oscillations
in a Three Generation Approach*

18.00 **L. Camilleri** (CERN)
Neutrino Oscillation Experiments at Accelerators

18.30 **Y. Declais** (LAPP)
Neutrino Oscillation Experiments at Reactors

19.00 **G. Conforto** (Univ. of Urbino)
A Complete Solution to Neutrino Mixing

19.10 **E n d o f t h e S e s s i o n**

Thursday, February 24, 1994

UNDERGROUND NEUTRINO PHYSICS

Chairman: **C. Bemporad** (Univ. of Pisa)

- 9.00 **T. Gaisser** (Univ. of Delaware)
Cosmic Neutrinos
- 9.30 **B.C. Barish** (CALTECH)
Underground Neutrino Experiments: Future Prospects and New Ideas
- 10.00 **S. Mikheyev** (Gran Sasso Lab)
Detection of High Energy Neutrinos with MACRO
- 10.15 **D. Kielczewska** (Univ. of Warsaw)
New Results on Atmospheric neutrinos from IMB Experiment
- 10.30 **G. Sartorelli** (INFN, Bologna)
Neutrino Physics and Astrophysics with LVD
- 10.45 **E. Alexeyev** (INR, Moscow)
Experimental Program of the Baksan Neutrino Observatory
- 11.00 **C o f f e e B r e a k**

UHE NEUTRINO PHYSICS and ASTRONOMY

Chairman: **J. Schneps** (Tufts Univ.)

- 11.30 **F. Halzen** (Univ. of Wisconsin)
UHE Neutrino Astronomy
- 12.10 **S. & G. Domokos** (Johns Hopkins Univ.)
Unusual Events in Neutrino Telescopes: Hints of New Physics
- 12.25 **M. Steuer** (MIT)
Cosmic Neutrino Detection with Collider Detectors
- 12.40 **S. Mikheyev** (Gran Sasso Lab)
Muons Produced by UHE Neutrinos in the Earth
- 12.50 **G. Navarra** (Univ. of Turin)
EAS Measurements and UHE Neutrino Flux
- 13.00 **L u n c h**

UHE NEUTRINO EXPERIMENTS

Chairman: **R.L. Sulak** (CEN, Saclay & Univ. of Boston)

14.30 **J.G. Learned** (Univ. of Hawaii)
News from DUMAND

15.00 **G.V. Domogatsky** (INR, Moscow)
Progress Report on Lake Baikal Experiment: First Results from Detector NT-36

15.30 **R.M. Morse** (Univ. of Wisconsin)
AMANDA: Recent Progress

15.45 **L.K. Resvanis** (Univ. of Athens)
Status Report on NESTOR

16.00 **A.A. Petrukhin** (Engineering Physics Institute, Moscow)
NEVOD: Neutrino Water Detector on the Earth's Surface

16.15 **C o f f e e B r e a k**

ASTROPHYSICS and COSMOLOGY

Chairman: **W.F. Fry** (Univ. of Wisconsin)

16.45 **Q. Shafi** (Univ. of Delaware)
Particle Physics and Large Scale Structure Formation

17.20 **G.F. Bignami** (IFC, Milan)
Gamma Ray Bursts

17.55 **N. Vittorio** (Univ. of Rome II)
Cosmology and Galaxy Formation

18.30 **D.W. Sciama** (SISSA, Trieste)
Concluding Remarks

E n d o f t h e S e s s i o n

20.30 **“Conference Dinner”**