

**Results and Perspectives in Particle Physics**

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**SCIENTIFIC PROGRAMME**

March 1<sup>st</sup>, 2003

***Monday, March 10<sup>th</sup>***

**Session I – Astrophysics and Cosmology**

1. Coincidence of Gravitational Waves Detectors (Eugenio Cocchia, Roma)
2. Observation of Ultra-High Energy Cosmic Rays with the HiRes Detector (Wayne Springer, Salt Lake City)
3. Puzzle of magnetic fields in cosmology (Alexander Dolgov, Ferrara)
4. Gamma Ray Bursts and the Sociology of Science (Alvaro de Rujula, CERN)
5. Relativity and  $c/\sqrt{3}$  (Michail Vysotsky, ITEP)

**Session II - Neutrino Physics**

1. The Running-in of MINOS (Phil Adamson, London)
2. Neutrino Astronomy at the South Pole (Paolo Desiati, Madison)
3. Results from the KamLAND Neutrino Oscillation Experiment (Yoshi Uchida, Stanford University)
4. Results from SuperKamiokande (Larry Sulak, Boston)
5. Indications of neutrino oscillation in the K2K long-baseline neutrino oscillation experiment (Taku Ishida, KEK)
6. Results from SNO (Andrew Hime, Los Alamos National Laboratory)
7. The Start of the MiniBoone Experiment (Jonathan Link, New York)
8. Perspectives in Neutrino Physics (Francesco Vissani, Gran Sasso)

***Tuesday, March 11<sup>th</sup>***

**Session III – Heavy Flavour Physics- I**

1. CHORUS Results on Charm Physics (Takayuki Kawamura, CERN)
2. New Results on  $\Psi(2s)$  from BES (Wenfeng Wang, Beijing)
3. Recent Results and Future Plans of CLEO (Roy Briere, Carnegie Mellon)
4. Charm Physics in CDF (Ivan Furic, MIT)
5. Mysteries in Charmonium Production (Michail Danilov, ITEP)

**16.30- 19.30**

**Session III - Heavy Flavour Physics-II**

6. Recent Results on B physics at D0 (Heriberto Castilla, CINVESTAV-IPN Mexico)
7. B production and decays in CDF Run 2 (Matt Herndon, Baltimore)
8. B decay properties at BaBar (Franco Simonetto, Padova)
9. High Precision Measurements of B-Decay Final States at Belle (Nick Hastings, KEK)

## *Wednesday, March 12th*

**8.30 – 11.30**

### **Session IV - Heavy Ions Physics**

1. Recent Results from the Heavy Ion Collider Program at RHIC (Sebastian White, BNL)
2. Decorrelation of jets in DIS off nuclei (Vladimir Zoller, ITEP)

### **Session V – Electroweak and Top Quark Physics**

1. W Mass and EWK fits at LEP (Andrea Venturi, Pisa)
2. Heavy flavour electroweak + LEP2 ff (Thomas Schoerner-Sadenius, CERN)

**16.30-19.30**

### **Session V – Electroweak and Top Quark Physics**

3. Forward-Backward Asymmetry at very high energies (Boris Ermolaev, St.Petersburg)
4. Recent Results on Electroweak Physics and QCD at D0 (Bob Kehoe, East Lansing)
5. Top and EWK Physics at CDF (Anyes Taffard, Liverpool)
6. Recent Results on Top Physics at D0 (Marumi Kado, LBL)
7. Consequences of Large Top-quark Chiral Weak Moment (Charles Nelson, New York)

## **CONCERT**

## *Thursday, March 13th*

**8:30 – 11.30**

### **Session VI – CP Violation, and Rare Decays**

1. Measurements of the Unitarity Triangle at Belle (Takeo Higuchi, KEK)
2. Rare B decays at BaBar (Sandrine Laplace, Orsay)
3. CP violation measurements in BaBar (Riccardo Faccini, Roma)
4. Direct CP Violation Searches at Belle (Alexei Drutskoy, Moscow)
5. CKM fits and new-physics in B-Bbar mixing (Gino Isidori, Frascati)
6. CP Violation and Rare decays in the K sector at NA48 (Ivan Mikulec, Wien/CERN)

**16.30 – 17.30**

### **Session VI – CP Violation, and Rare Decays, continued**

7. Semi-phenomenological approach to estimate of CP-effects in decay of charged Kaons into three pions (Eugeny Shabalin, ITEP)
8. Theory of rare kaon decays (Giancarlo D'Ambrosio, Napoli)

**17.30-19.30**

### **Special Session – Physics and Society**

1. Trends and Perspectives in Quantum Information and Computation (Francesco De Martini, Roma)
2. Inter/Actions. Global Communication Strategies for a Global Community (Judith Jackson, Fermilab)
3. The Threat of Nucleare Contraband: a technical assessment (Massimiliano Russo, CISAM)

## **GALA DINNER**

## *Friday, March 14<sup>th</sup>*

**8.30 – 11.30**

### **Session VII - QCD**

1. Measurement of Tensor Polarized Structure Function at HERA (Marco Contalbrigo, Ferrara)
2. Results from the KLOE Experiment (Luca Passalacqua, LNF)
3. COMPASS Status and Perspectives (Jorg Pretz, Mainz)
4. Jet studies at CDF in Run 2 (Robert Snihur, London)
5. Jet physics at LEP and QCD (Igor Dremin, Moscow)

## *Friday, March 14<sup>th</sup>*

**16.30-19.30**

### **Session VIII - Search for Physics Beyond the SM**

1. Higgs results and searches for new physics at LEP (Pablo Garcia, Madrid)
2. Four Fermion and anomalous couplings limits at LEP (Philip Bambade, Orsay)
3. Searches for New Physics at HERA (Lorenzo Bellagamba, Bologna)
4. Lepton Production in  $ep$  Collisions (Emanuel Savan, Marseille)
5. Searches for New Phenomena at CDF (Luca Scodellaro, Padova)
6. Recent Results on New Phenomena Searches at D0 (Wyatt Merritt, Fermilab)
7. Z-lineshape versus 4th generation (Victor Novikov, ITEP)

## *Saturday, March 15<sup>th</sup>*

**8.30-10.30**

### **Session IX – Future Experiments and Projects**

1. Prospects for Higgs Physics at D0 (Makoto Tomoto, Fermilab)
2. A sensitive search for the  $\mu \rightarrow e \gamma$  decay: the MEG experiment (Marco Grassi, Pisa)
3. Perspectives of the ALICE Experiment (Massimo Masera, Torino)
4. Future Missions in Space (Giovanni Bignami, Pavia/Toulouse)