



SCIENTIFIC PROGRAMME

PRELIMINARY

February 6, 2004

Monday, March 1st

8.30 – 11.30 (3h)

Session I – Astrophysics and Cosmology –

1. Possible Sources of Gravitational Wave Bursts in the Galaxy (Eugenio Cocchia, Roma/LNGS)
2. Recent Results from WMAP (Licia Verde, Princeton)
3. Search for Axions from the Sun (Theofisti Dafni, T.U. Darmstadt)
4. The Status of Ultra-High Energy Cosmic Ray Studies (Angela Olinto, University of Chicago)
5. Origin of the High Energy Cosmic Rays (Arnon Dar, Technion)
6. Problems of Vacuum and Dark Energy (Alexander Dolgov, Ferrara)

16.30-17.30

7. Solar X-Rays as a Signature for New Particles (Kontantin Zioutas, Thesaloniki/CERN)
8. Dark Matter, Dark Energy, Inflation (Rocky Kolb, Fermilab)
9. Neutrino in Astrophysical Magnetized Matter (Alexander Studenikin, Moscow)

17.30 – 19.05

Session II - Neutrino Physics

1. Results from K2K (Kyungkwang Joo, Seoul)
2. Results from SNO (Simon Peeters, Oxford)
3. Present and Future of Neutrino Reactors Experiments (Karsten Heeger, Berkeley)

Tuesday, March 2nd

8.30-10.30

Session II –continued Neutrino Physics

4. Double Beta Decay: A Review (Samoil Bilenky, Moscow)
5. JPARC (Japan Proton Accelerator Research Project) (Takashi Kobayashi, KEK)
6. The Fermilab Off-Axis Neutrino Project (Alfons Weber, RAL)
7. Neutrino Mass and Mixing: a New Symmetry of Nature? (Alexei Smirnov, Moscow/ICTP)

10.30- 11.30

Session III- QCD Physics

1. Study of Dimuon Production in Heavy Ion Collisions at NA60 (Hermine Woehri, CERN)
2. QCD Results from the LEP Experiments (Maria Kienzle, Geneva)

16.30- 19.30

Session III- QCD Physics (continued)

3. QCD Physics at the Tevatron (Giuseppe Latino, New Mexico)
4. QCD Physics at HERA (Guenther Grindhammer, DESY)
5. Production of Heavy Flavour States at the Tevatron (Rick Jesik, London)
6. Twenty Years of Bottom Production (and Charm, and Top) vs. QCD (Matteo Cacciari, Paris)
7. Hadronic Diffraction: Where do we stand? (Dino Goulianos, New York)
8. GTeV: The Future of QCD at the Tevatron (Mike Albrow, Fermilab)
9. Singlet and non-Singlet Contributions to the Spin Structure Function g_1 at small x (Boris Ermolaev, St.Petersburg)

Wednesday, March 3rd

8.30-11.30

Session IV –Heavy Flavour Physics

1. Results from CLEO (Alex Smith, Minnesota)
2. Recent BES Results on Charmonium Physics (Zhu YongSheng, Beijing)
3. BES Physics Results with Psi (3770) Data (Kanglin He, Beijing)
4. Charm Results from FOCUS (Stefano Bianco, Frascati)
5. Charm Physics at BaBar (Alexis Pompili, Bari)
6. Masses and Lifetimes of B and C Hadrons at the Tevatron (Todd Huffman, Oxford)

16.30- 17.30

Session IV –Heavy Flavour Physics (continued)

7. Experimental Review on Quarkonium (Vaia Papadimitriou, Fermilab/Texas Tech)
8. Quarkonium: What we know, what we learnt, what else? (Chris Quigg, Fermilab)

17.30 – 19.30

Session V– Round Table

Which Linear Collider and Where?

Ties Behnke (DESY), Phil Burrows (Oxford), Albert de Roeck (CERN), Hitoshi Yamamoto (Tohoku), Nan Phinney (SLAC), Pantaleo Raimondi (Frascati), Fabio Zwirner (CERN/Roma)

Thursday, March 4th

8:30 – 11.30

Session VI– CP Violation, and Rare Decays

1. Time Dependent CP Violation in B Mesons at BELLE (Tim Gershon, KEK)
2. Direct and Indirect CP Violation at BaBar (Gregory Schott, Saclay)
3. Selected Topics on Rare B Decays at BELLE (Frederic Ronga, KEK)
4. Semileptonic B Decays at BaBar (Olga Igonkina, Oregon)
5. Prospects for CP Violation Measurements at the Tevatron (Diego Tonelli, Pisa)
6. Recent Results from KLOE (Tommaso Spadaro, Frascati)
7. First observation of $K_s \rightarrow \pi^0 \mu^+ \mu^-$ and $K_s \rightarrow \pi^0 e^+ e^-$ at NA48 (Teresa Fonseca Martin, Chicago)

16.30- 17.00

8. Sensitivity to New Physics in $B \rightarrow VV$ Polarization (Alex Kagan, Fermilab)

17.10-19.30

Special Session - PHYSICS AND SOCIETY

1. The relationship between Scientists and Government (George Kalmus, Oxford)
2. New Technologies for the XXI Century (George Atkinson, U.S. State Department)
3. New and old Nuclear Reactors: Solutions and Myth (Carlo Bernardini, Roma)

Friday, March 5th

8.30 – 11.30

Session VII-Electroweak and Top Quark Physics

1. EWK Physics at LEP (Fabio Cossutti, Trieste)
2. W and Z Physics at D0 (Nirmalya Parua, Stony Brook)
3. W and Z Physics at CDF (Victoria Martin, Chicago)
4. Top Physics at CDF (Julia Thom, Fermilab)
5. Top Physics at D0 (Stefan Anderson, Arizona)
6. New Results on muon $g-2$ (Ivan Logashenko, Boston/Novosibirsk)

16.30-19.30

SESSION VIII

Search for Physics Beyond the SM

1. Searches for Physics Beyond the Standard Model at LEP (Cristoph Rembser)
2. Searches and Signals of New Physics at HERA (Stefano Dusini, Padova)
3. Anomalies in Heavy Flavour Jets at CDF (Giorgio Apollinari, Fermilab)
4. Prospects of Higgs Searches at the Tevatron Collider (Kazu Hanagaki, Fermilab)
5. Searches for Physics Beyond the Standard Model at the Tevatron (Reiner Hauser, Michigan)
6. Hints for New Physics? (Riccardo Rattazzi, CERN)
7. Beyond the SM (Pran Nath, Boston)
8. Time Dependent Physics Constants? (Harald Fritzsch, Munich)

Saturday, March 6th

8.30-10.30

Session IX – Ideas for the Future

1. Searching for Dark Matter in Space with AMS (Sylvie Rosier, Saclay)
2. Optical Activity of Cosmic Space (Victor Novikov, Moscow)
3. Towards a Complete Theory of Gamma Ray Bursts (Alvaro deRujula, CERN)
4. New MonteCarlo Tools for LHC Physics (Michelangelo Mangano, CERN)