

SEMINARS SEMINAIRES

Monday 29 March

PPE SEMINAR

at 16.30 hrs – Auditorium

Recent results from D0

by Ulrich HEINTZ / Columbia Univ., New York

The D0 detector has recently been commissioned and is presently taking data at the Fermilab Tevatron. I will report on the status of analysis of these data and present preliminary results from measurements of jet cross-sections and angular distributions, direct photons, single and di-muon production, W and Z boson production, and the search for the top quark in the ee and $e\mu$ channels.

Tuesday 30 March

DETECTOR R&D COMMITTEE

Open session

at 09.00 hrs – Auditorium

1. RD-1 Status Report : Scintillating fibre calorimetry at the LHC (Cagliari–CERN–Clermont Ferrand–Ecole Polytech.–Lisbon–Marseille–Naples–Paris VI–Pavia–Rio de Janeiro–San Diego–Weizmann Inst. Rehovot; DRDC 93-16; J.M. Gaillard).
2. RD-2 Status Report : Study of a tracking/preshower detector for the LHC (Bern–Cambridge–CERN–Dortmund–Geneva–Hamburg–Moscow–Oslo–Oxford–Perugia–RAL–Saclay; DRDC 93-18; A.G. Clark).
3. RD-9 Status Report : A demonstrator analog signal processing circuit in a radiation hard SOI-CMOS technology (CERN; DRDC 93-17; E.H.M. Heijne).

Closed session

following the Open Session continuing on
Wednesday 31 March
at 09.00 hrs – 6th floor Conference Room
Main Building

Mardi 30 mars

PRÉSENTATION TECHNIQUE

de 14.00 à 15.30 h – bât. 61, Salle B (1er étage)

de 14.00 à 17.00 h – Bus de démonstration, parking
sous ligne haute tension, J25 / g8 du plan CERN

**"Moving Experience" avec les stations de travail
industrielles de Hewlett-Packard**

par Mark LUFKIN & Alain STROHMEIER

Famille des stations de travail HP, stations de travail standards, stations de travail industrielles et realtime system. Développement d'applications CASE / Softbench; HP-UX 9.0, caractéristiques et avantages; HP-UX / HP-RT VME-Services. Solutions VME, acquisition de données et contrôle, communications LAN et WAN.

Langues : anglais, français

Renseignements : M. Diraison / FI -A / 4585

Tuesday 30 March

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*

**Is there experimental evidence for coherence
of soft gluons from the momentum spectra
of hadrons in e^+e^- data?**

by P.V. CHLIAPNIKOV / Institute for High Energy
Physics, Protvino, Russia

Evidence for soft gluon coherence from the available experimental data on the inclusive momentum distributions of particles produced in multihadronic events in e^+e^- annihilation is questioned. The QCD shower Monte Carlo programs are used to study the dependence of the inclusive momentum distributions of different particles on flavours of initial quarks in e^+e^- states. The significance of agreement of the experimental data with the analytical calculations based on the Modified Leading Logarithmic Approximation and on the hypothesis of the Local Parton Hadron Duality is discussed.

* Tea & coffee will be served at 16.00 hrs.

Wednesday 31 March

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Quantum chaos

by E. BOGOMOLNY / Orsay & Landau Institute

Quantum chaos is the investigation of deterministic quantum systems whose classical limit has certain chaotic behaviour. In the lecture a short review of this subject will be given and the following items will be discussed:

- Classical integrable and chaotic models and their quantum counterparts
- Semiclassical quantization of chaotic systems. Trace formulas and zeta functions
- Hydrogen atom in a magnetic field. Quasi-Landau resonances
- Helium atom
- Models on constant negative curvature surface. Selberg trace formula
- Statistical distributions of energy levels and wave functions
- Arithmetical chaos
- Heavy nuclei and number theory

Wednesday 31 March

COMPUTING SEMINAR

at 16.00 hrs – CN Auditorium, bldg 31/3-005

Parallel processing for interactive applications

by Simone GIANI / CERN-CN

The visualization for the new GEANT 3-20 geometry is based on a ray-tracing package. This kind of algorithm has proven to be suitable for parallelization on clusters of workstations (HP9000 and IBM RS6000). Different network configurations have been tested: Ethernet and Serial Optical

Links, both of them with TCPIP and UDP as protocols. The effect of the latency and of the bandwidth on the total speed-up has been measured. A general mathematical formalization has been developed and its theoretical predictions have been verified by the experimental results. The total speed-up is almost linear for long task times (60 sec), but it degrades rapidly for very short task times (1 sec). A set of 5-8 workstations is the ideal number to get an efficient speed-up.

Thursday 1 April

LEP EXPERIMENTS COMMITTEE

Open session

at 09.30 hrs – Auditorium

09.30 - 10.10 *Report on the 3rd LEP Performance Workshop (S. Myers)*

10.10 - 10.40 *Report on the Shutdown Activity (L. Evans)*

10.40 - 11.10 *Coffee Break*

11.10 - 11.40 *Report by the LEP Background Working Group (G. von Holtey)*

11.40 - 12.10 *Status Report on the LEP Supra-conducting Cavities (Ph. Bernard)*

Lunch Break

Status Reports on the Experiments and Requests for the 1993 Run

14.00 - 14.25 *ALEPH*

14.25 - 14.50 *DELPHI*

14.50 - 15.15 *OPAL*

15.15 - 15.40 *L3*

15.40 - 16.10 *Tea Break*

Closed session

after the Open Session, 6th Floor Conference Room, Main Building

Jeudi 1^{er} avril

CONFÉRENCE-DÉBAT

Organisée par l'association MCP

(Mouvement pour la condition paternelle) de Genève

à 20.15 h – Amphithéâtre – Entrée libre

La place du père auprès de l'enfant

par Evelyne SULLEROT*

Sociologue, Evelyne SULLEROT est l'auteur de "Quels pères? Quels fils?" (Fayard, 1992) et de plusieurs autres livres traitant notamment des problèmes féminins.

Friday 2 April

SEMINAR

at 11.00 hrs - ECP Conference Room
bldg 13/2-005

Microelectronic User Group MUG

Electronics and microelectronics for the GEM detector at SSC

by Daniel MARLOW / Princeton

Friday 2 April

MEETING ON

PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room

Electroproduction of heavy quarks

by Eric LAENEN / Fermilab

I present results of the calculation of the $O(\alpha_s)$ corrections to heavy flavour structure functions and inclusive p_t and rapidity differential distributions in electroproduction. In addition, I will discuss the bearing these results have on the heavy quark content of the proton, and, hopefully, recent work on QCD corrections to photon structure functions.

Monday 5 to Wednesday 7 April

WORKSHOP ON MATERIALS SCIENCE WITH RADIOACTIVE ISOTOPES – ISOLDE / CERN

Monday 5 April

at 09.00 hrs – Council Chamber
bldg 503, first floor

09.00–09.30 *Recent Radioactive Ion-Beams Development of Interest for Materials Science*

H. Ravn / CERN-ISOLDE

09.30–10.00 *Longlived Primary Radioisotopes of Transition Metals and Non-Transition Metals*

K. Freitag / University of Bonn

10.00–10.30 *Ion Implantation in Semiconductor Technology*

L. Frey / Fraunhofer Gesellschaft AIS - Erlangen

10.30–11.00 *Coffee break*

11.00–11.30 *Structural Investigation of Implantation Damage in Semiconductors by Emission Channeling*

S.G. Jahn / University of Konstanz

11.30–12.00 *Electrical Characterization of High Energy Implants in Semiconductors*

R. Gwilliam / University of Surrey

12.00–14.00 *Lunch*

14.00–14.30 *New Isotopes for Perturbed Angular Correlation Spectroscopy*

G. Correia / CERN-ISOLDE

14.30–15.00 *Surface Physics with Radioactive Ion Beams*

H. Haas / HMI - Berlin

15.00–15.30 *Conversion Electron Mössbauer Spectroscopy Studies of Surfaces and Thin Films*

J. Korecki / University of Mining and Metallurgy, Krakow

15.30–16.00 *Coffee break*

- 16.00–16.30 *Infrared Spectroscopy of Buried Ultrathin SiO_x - films by the Grazing - Internal-Reflection / Transmission Technique*
R. Brendel / MPI FKF - Stuttgart
- 16.30–17.00 *The Theory of Rare-Earth Impurities in Semiconductors*
Lannoo - I.E.M.N. - ISEN - Lille
- 17.00–17.30 *Impurities and Defects in CdTe and ZnTe Semiconductors*
J.L. Pautrat / CENG - Grenoble

Tuesday 6 April

at 09.00 hrs – Council Chamber
bldg 503, first floor

- 09.00–09.30 *Deep Level Point Defects in III-V Semiconductors and their Structure*
A. Winnacker / University of Erlangen
- 09.30–10.00 *The Determination of Impurity Sites in GaAs from Isotopic Structure Revealed in Infrared Vibrational Spectra*
R.C. Newman / Blackett Laboratory - London
- 10.00–10.30 *The Densities of States of Substitutional Tin and Germanium Impurities in GaAs, GaP and InP Measured by Electron Spectroscopy*
J. W. Petersen - Mikroelektronik Centret of Denmark - Lyngby
- 10.30–11.00 *Coffee Break*
- 11.00–11.30 *Ion Implantation Problems in GaAs*
B. J. Sealy / University of Surrey
- 11.30–12.00 *Hydrogen Passivation of III-V Semiconductors Studied by Perturbed Angular Correlation Spectroscopy*
D. Forkel / CERN-ISOLDE / CERN
- 12.00–14.00 *Lunch*

at 14.00 hrs – PS Seminar Room
bldg 6/2–024

- 14.00–14.30 *Diffusion of Metal Atoms in Amorphous Silicon*
W. Frank / MPI FKF - Stuttgart
- 14.30–15.00 *Quasielastic Moessbauer Spectroscopy to Determine the Diffusion Mechanism in Intermetallic Phases*
G. Vogl / University of Wien
- 15.00–15.30 *Diffusion of Fe - Atoms via Interstitial Lattice Positions observed by In-Beam Moessbauer Spectroscopy*
R. Sielemann / HMI, Berlin
- 15.30 - 16.00 *Coffee break*
- 16.00 - 17.30 *Guided tour at ISOLDE*

Wednesday April 7

at 08.30 hrs – Council Chamber
bldg. 503, first floor

- 08.30–09.00 *Determination of Defect Structures by ESR/ENDOR*
J.R. Nicklas / Univ. Bergakademie Freiberg
- 09.00–09.30 *Defects in Silicon : Identification and Recombination*
B. Monemar / Linköping University
- 09.30 - 10.00 *Evidence for Vacancy Percolation in Highly-Doped Silicon*
G. Weyer / University of Aarhus
- 10.00 - 10.30 *Coffee break*
- 10.30 - 11.00 *Deep Level Transient Spectroscopy of Detector Grade Silicon*
S. Watts / Brunel University
- 11.00 - 11.30 *Deep Level Transient Spectroscopy on Radioactive Impurities in Semiconductors*
N. Achtziger / University of Erlangen
- 11.30 - 12.00 *Conclusion*

Tuesday 6 April

LARGE HADRON COLLIDER COMMITTEE

Open session

at 09.00 hrs – Auditorium

- 09.00 – 10.00 *Presentation of a Letter of Intent for a Large Ion Collider Experiment (LHCC 93-16 /14; J. Schukraft).*

Closed session

at 11.00 hr – 6th floor Conference Room
Main Building continuing on
Wednesday 7 & Thursday 8 April

DANS LE CADRE DE LA FRANCE AU CERN

Mardi 30 mars

PRÉSENTATION TECHNIQUE

à 12.15 h – Salle du Conseil, bât. 503

La Comex "Les plongeurs de l'impossible"
trois films d'Alain Tocco
1^{er} film, durée 26 minutes :
Les plongeurs du froid

Juin 1975 : au large du Labrador, six plongeurs de la Comex assurent la récupération d'une tête de puits par 326 mètres de profondeur. Température de l'eau : 2° C. Conditions météorologiques très dures et la présence d'énormes icebergs rendent l'opération encore plus difficile.

Langue : français

Renseignements : M. Diraison / FI-A / 4585