

## SEMINARS SEMINAIRES

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### Monday 11 February

#### AC SEMINAR

at 11.00 hrs – AT Auditorium  
bldg 30, 7th floor

#### Conclusions from the 1st LEP Performance Workshop

by Stephen MYERS / CERN & Carlo WYSS / CERN

*The purpose of the 1st LEP Performance Workshop was :*

- to review the present situation with LEP and the proposed upgrades;
- to make proposals for improvements in performance;
- to set priorities for the implementation of these proposals;
- to organize small teams to carry out the work necessary for the implementation of the proposals; and
- write up the results.

*The Workshop was subdivided into 10 specific sessions with an additional session for 'summing-up'. Each session lasted 3 hours and was organized by a session chairman and a scientific secretary. In this seminar an overview is given of the conclusions for each of the 10 sessions. The present-day limitations to performance are analysed, and the foreseen improvements aimed at raising the performance are discussed. The presentation is split into two parts : part 1 covers the present LEP, transverse polarization and the 'crash' luminosity upgrade; part 2 covers the technical and beam dynamics aspects of the approved LEP energy upgrade.*

### Monday 11 February

#### ASTROPARTICLE SEMINAR

at 11.00 hrs – TH Conference Room

#### Global cosmic strings

by Diego HARARI / Institute for Astronomy & Space Physics, University of Buenos Aires, Argentina

*Cosmic strings formed after the breakdown of a global symmetry decay mostly through radiation of Goldstone bosons. We discuss their implication for axion models. We also analyze electromagnetic properties of global strings originating from their coupling through the anomaly.*

### Monday 11 February

#### PPE SEMINAR

at 16.30 hrs – Auditorium

#### $\phi$ , and $p\omega$ production in ultrarelativistic heavy ion collisions (NA38 experiment)

by Denis JOUAN / Institut de Physique nucléaire, Orsay

*Experimental results on low mass dimuon production in 200 GeV/n P, O and S on Uranium target will be presented. They show an enhancement of the  $\phi$  production in collisions induced by ions as compared to protons. This increase is also observed with increasing transverse energy. This effect will be compared to experimental results from hadron induced reactions, and to the predictions of theoretical models assuming or not quark-gluon plasma formation.*

### Tuesday 12 February

#### PARTICLE PHYSICS SEMINAR

at 16.30hrs – Auditorium\*

#### Physics and status of the tau-charm Factory

by Jasper KIRKBY/CERN

*Progress in particle physics requires experimental exploration of both the high-energy and the high-precision frontiers. Five years from now, the pursuit of the latter will require experiments at dedicated machines – known as particle 'factories' – that can produce selected particles in copious quantities and under low-background conditions. Among these is a high-luminosity  $e^+e^-$  collider operating near tau-charm threshold – the tau-charm Factory – which will study the tau lepton, the charm quark, and the spectrum of gluonic and other light particles in the decays of the  $J/\psi(3.10)$ . The physics aims and the status of this project will be presented.*

\* Tea & coffee will be served at 16.00 hrs

### Wednesday 13 February

#### CN TECHNICAL PRESENTATION

at 10.00 hrs – CN Auditorium  
bldg 31/3-005

#### The future of CASE

by Richard BARKER / Senior Vice President, Oracle Corporation

*Oracle believes that one of the major methods for delivering powerful yet flexible computer application systems is by the introduction of a new generation of portable generic application packages which fit together seamlessly. The second major aspect is the use of modern relational database management systems, ever more powerful fourth/fifth generation languages under the umbrella of an integrated Computer-Aided Systems Engineering environment, i.e. the ability to rapidly build high quality portable applications in an effective and timely manner. This presentation looks at the problems and issues, identifies Oracle's strategic developments in these areas and specifically looks at the next generation of Oracle's CASE tools. During the presentation the speaker will be happy to answer questions on as many other areas of interest for which there is time.*

Language: English

Organizer: Sverre Jarp / CN

## Wednesday 13 February

### PS SEMINAR

at 11.00 hrs – PS Auditorium  
bldg 6/2-024

#### **The Brazilian Synchrotron Light Source : a progress report**

by Cylon Goncalvez DA SILVA / Laboratorio Nacional de Luz Sincrotron (LNLS), Campinas, Brazil

*We will discuss the present status of the Laboratorio Nacional de Luz Sincrotron. Results accomplished to date include the local construction of an RF electron linear accelerator, with final energy of 50 MeV. This is part of the injection system into the projected 1.15 GeV electron storage ring being planned by LNLS. The ring conceptual design will be presented. General information about the overall planning of the facility will also be presented.*

## Monday\* 18 February

### CERN COMPUTER COLLOQUIUM

at 16.30 hrs – Auditorium\*\*

#### **Interactive Design and Simulation – The Next Computer Revolution**

by Abe PELED / IBM, Yorktown Heights

*Over the next decade, we can expect interactive design, analysis and simulation to transform and completely revolutionize the way scientists and engineers work. The dramatic increase in computing power that will be available to individuals, coupled with natural means of interaction involving all our senses – visual, auditory and tactile – promises to produce the most fundamental changes in the nature of computing, making the computer an extension and amplifier of human intelligence.*

Abe Peled obtained his PhD in Electrical Engineering from Princeton University, and joined IBM Research in 1974. Since 1985 he has been Research Division Vice President and Director of Computer Sciences with responsibility for the overall Computer Sciences strategy for IBM's Research Division.

\* Please note unusual day and time

\*\* Tea & coffee will be served at 16.00 hrs

## Tuesday 19 February

### LEP EXPERIMENTS COMMITTEE

#### **Open session**

at 09.00 hrs – Auditorium

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|---------------|--------------------------------------------------------------------------------|
| 09.00 – 09.15 | <i>Opening Remarks by the Director-General</i>                                 |
| 09.15 – 10.30 | <i>Report on the LEP Performance Workshop (Speakers to be announced later)</i> |
| 10.30 – 10.50 | <i>Status Report on the LEP Energy Calibration (J. Panman)</i>                 |
| 10.50 – 11.15 | <i>Coffee Break</i>                                                            |

### *Status Reports on the Experiments*

11.15 – 11.45 OPAL

11.45 – 12.15 L3

12.15 – 12.45 ALEPH

12.45 – 13.15 DELPHI

#### **Closed session**

Conference Room, 6th Floor, Administration Building

## Tuesday 19 February

### CN TECHNICAL PRESENTATION

at 10.30 hrs – CN Auditorium  
bldg 31/3-005

#### **A dual processor MC68040 VMEbus module**

by Joël BOVIER / Director, Research & Development, Creative Electronic Systems, Geneva

Language: English / français

Organiser: C. Parkman / CN

## Tuesday 19 February

### CERN PARTICLE PHYSICS SEMINAR

at 16.30 hours – Auditorium

#### **QCD coherence – as seen through the eyes of LEP and hadronic colliders**

by Valery KHOZE / CERN– TH & Leningrad Institute for Nuclear Physics

## Wednesday 20 February

### CN SEMINAR

at 15.00 hrs – Council Chamber

#### **HOOPS Graphic system**

by H.R. KOTTMANN & J. SINGH / DWIM Software, Basel

## Jeudi 21 février

### PRESENTATION TECHNIQUE

de 10.00 à 16.00 h – bât. 17/1-007

*Rank Xerox SA (USA/F/CH) propose en démonstration les modèles Xerox tc 7021, tc 7033 et tc 3010 utilisant le même papier normal que celui des photocopieurs.*

Langue : français

Renseignements : M. Diraison / FI / 4585