

SEMINARS SEMINAIRES

Monday 3 December

SPECIAL ECP SEMINAR

at 11.00 hrs – ECP Conference Room
bldg 13, 2-005

Study for a fast cluster finding system for future HEP experiments

by Dario CROSETTO / INFN Torino

A study for a parallel-processing system based on data-driven array processors, digital signal processors and transputers for trigger decision, data acquisition and compaction will be presented. The system is modular and suitable for any calorimeter sizes and types such as the ones proposed in the R&D for the LHC experiments.

Monday 3 December

AC SEMINAR

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

Coupling of transverse movements in LEP, or What 7 μm of nickel can really do

by J. BILLAN / CERN-AT

From the beginning, LEP has shown an unexpected transverse coupling limiting the machine performances. A first remedy involving a change of tune and additional skew quadrupoles in the arcs permitted us to reach good physics conditions. A thorough search of the causes revealed that the nickel layer between the lead and aluminium of the vacuum chambers is in fact the most important cause of coupling. The mechanism leading to coupling, the solutions adopted and the measurements performed are presented.

Monday 3 December

PPE SEMINAR

at 16.30 hrs – Auditorium

Search for the Standard Model Higgs Boson with the L3 detector at LEP

by Andrey KUNIN / ITEP

A search for the Standard Model Higgs boson has been performed with the L3 detector at LEP. The analysis is based on 5.4 pb^{-1} of data collected in the region of centre-of-mass energies from 88.2 to 94.2 GeV. Results and interpretation of a direct search for the Higgs boson, produced in the reaction $e^+e^- \rightarrow Z^0 H^0$, $Z^0 \rightarrow \nu\nu$, $\mu\mu$ or ee , will be presented.

Tuesday 4 December

TECHNICAL PRESENTATION

09.00 to 17.00 hrs – bldg 6, 2-004

LeCroy Corporation of New York + Geneva Exhibition of new products from their range of fast data acquisition instruments and digital oscilloscopes. FASTBUS + CAMAC instruments include the 1872, 25pS high resolution TDC, and a new subnanosecond, multihit TDC. The VME instrument range offers a bidirectional interface + buffer memory for use with the 1440 HV system controller, and a new 32 channel, presettable scaler. Micro-circuit components include low noise preamplifiers for silicon strip and wire calorimeter readout. Two new digital oscilloscopes with familiar smart triggering and long memories are introduced. The 9410 offers low cost performance, whereas the wider dynamic range 9430 has 10 bits for precision measurements. The 2GS/s option for 7200 DSO will be shown, and all with friendly front panel controls.

Langues : English, French, German, Italian
Information : M. Diraison / FI / 4585

Tuesday 4 December

CN TECHNICAL PRESENTATION

at 10.00 hrs – Technical Training Auditorium*
bldg 593, room 11

The Saber-C programming environment

by Ulrich FRANKE & Robert BELTING / IQproducts

Saber-C is a complete programming environment that offers an integrated toolkit for developing, testing, debugging and maintaining C programs. Its features allow a maximum of control over the quality of the software so produced and ease the meeting of project deadlines. IQproducts was founded in January 1990 and specialises in the distribution of standard software for the UNIX and VMS environments, in close cooperation with the system manufacturers.

10.00-10.30 IQproducts, the Company and product portfolio

10.30-11.00 Saber-C product presentation & preview of Saber-C++

11.00-12.00 Product demonstration

Language : English

Organiser : J. Harvey / PPE / 7358

* Please note unusual place!

Tuesday 4 December

PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*

Fluctuations and intermittency in particle collisions

by R. PESCHANSKI / CERN-TH & SphT. Saclay

As an introduction to methods and concepts, one reviews the main ingredients of the intermittency approach to multiparticle processes, namely the damping of purely statistical multiplicity fluctuations, the scale dependence of factorial moments and the intermittency signal. A selection of recent experimental and phenomenological findings in e^+e^- , μ -hadron, hadron-hadron and heavy-ion reactions will be discussed as well as the present status of our theoretical understanding in connection with QCD. New developments of the experimental analysis – but also some warnings to get meaningful results – will be proposed. Finally, one will discuss the possible links with Statistical Mechanics and the theory of chaotic phenomena.

* Tea & coffee will be served at 16.00 hrs.

Wednesday 5 December

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

New W-algebras

by W. NAHM / University of Bonn

Ideas about the classification of W-algebras by orbifold and coset constructions have been checked by the explicit computation of all W-algebras with two generating fields and spin up to 9. Several of the resulting algebras, some apparently the lowest members of two new series, were unexpected. Thus attempts at a full classification seem to be premature.

Friday 7 December

MEETING ON

PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room

Tests of 3-boson couplings at LEP energies

by C. G. PAPADOPOULOS / Institute of Nuclear Physics, Athens

After a brief review of $W^+W^- \gamma$, $W^+W^- Z$ and $ZZ\gamma$ couplings, we show that the study of different processes, involving 3-boson couplings both on- and off-shell, can be used to test the Standard Model predictions, well before the LEP II energy $\sqrt{s} = 200$ GeV. In this seminar, I will summarize recent results from single W production, $e^+e^- \rightarrow \nu\bar{\nu}\gamma$ and $e^+e^- \rightarrow W^+W^- \gamma$, as well as the earlier results of W^+W^- production. Differential distributions are also presented, suggesting that a more detailed analysis, taking into account the experimental situation, is worthwhile.

Monday 10 December

PPE SEMINAR

at 16.30 hrs – Auditorium

$b\bar{b}$ physics with the L3 detector

by Robert CLARE / MIT

We have made a measurement of mixing in the $B^0\bar{B}^0$ system and of the $Z^0 \rightarrow b\bar{b}$ forward-backward asymmetry. The $b\bar{b}$ events have been tagged using the semileptonic decays of the b quarks. Our results are based on approximately 5.5 pb^{-1} . We have determined the mixing parameter, χ_B to be $0.178 \pm 0.049 - 0.040$ and the asymmetry, A_{bb} to be $0.130 \pm 0.044 - 0.042$. From this value of A_{bb} we determine $\sin^2\theta_w$ to be 0.225 ± 0.008 .

Mardi 11 décembre

PRESENTATION TECHNIQUE

de 09.00 à 12.00 h – bât. 6, 2-004

Encore Computer SA (USA/F)

Langues : français, anglais

Renseignements : M. Diraison / FI / 4585

Tuesday 11 December

TIS SEMINAR

at 11.00 hrs – PE Auditorium (Techn. Training)
bldg 593, room 11

Learning by mistakes

Considérations sur la sécurité

Il senno del poi

by Franco BONAUDI / CERN-ECP

Wednesday 12 December

PS SEMINAR

at 11.00 – PS Auditorium
bldg 6, 2-024

The Darmstadt near infrared free-electron laser

by K. ALRUTZ-ZIEMSEN

Wednesday 12 December

CN SEMINAR

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

Cluster Automated Operations Service (CAOS)

by Steve CARNEY / CERN-CN

Thursday 13 December

TECHNICAL PRESENTATION

09.00 to 17.30 hrs – Car park along the Meyrin road between the main entrance and bldg 33 (Reception)

Silicon Graphics Computer Systems (USA/CH)

Languages : English, French

Information : M. Diraison / FI / 4585