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Les membres du personnel sont censés avoir pris connaissance des communications officielles ci-après.

La reproduction même partielle de ces informations par des personnes ou des institutions externes à l'Organisation exige l'approbation préalable de la Direction du CERN.

VOLS, CAMBRIOLAGES, ETC. LA PRUDENCE EST LA MEILLEURE DES PROTECTIONS

Dans votre propre intérêt, dans celui de vos collègues et de l'Organisation, mettez les recommandations suivantes en pratique:

1. ARGENT, OBJETS DE VALEUR & CLES:

Ne déterminez que le strict minimum d'argent liquide. Ne laissez jamais votre argent, vos objets de valeur et clés sans surveillance.

2. PORTES & FENETRES:

Fermez votre bureau, atelier, etc. à clé lorsque vous le quittez, ne serait-ce que pour peu de temps. Fermez également les fenêtres, si elles sont facilement accessibles de l'extérieur.

3. PICKPOCKETS:

Méfiez-vous notamment des bousculades.

4. DECLARATION:

Chaque délit élucidé élimine un risque de récidive. Signalez immédiatement les vols, pertes, disparitions et incidents aux pompiers du CERN (tél. 74444) et informez les de tout développement important (objet retrouvé, nouvel indice, etc.).

Groupe de Protection des Biens
Tél. 75152

OFFICIAL NEWS

Members of the personnel shall be deemed to have taken note of the news under this heading.

Reproduction of all or part of this information by persons or institutions external to the Organization requires the prior approval of the CERN management.

THEFTS, BREAK-INS, ETC. THE BEST PROTECTION IS CAUTION

In your own interest and that of your colleagues and the Organization please apply the following recommendations:

1. MONEY, VALUABLES AND KEYS:

Keep only a minimum of cash about your person. Never leave your money, valuables or keys unattended.

2. DOORS AND WINDOWS:

Always lock your office, workshop or place of work when you leave it, if only for a short space of time. Also close any windows that are easily accessible from the outside.

3. PICKPOCKETS:

Pay particular attention if you are jostled or bumped into.

4. REPORTING:

A thief caught is a theft prevented. Immediately report any thefts, losses, items mislaid and other incidents to the CERN Fire and Rescue Service (Tel. 74444) and inform them of any major developments (recovery of missing property, new information, etc.)

Property Protection Group
Tel. 75152

SEMINARS SEMINAIRES

Monday 30 March

EP SEMINAR

at 16.30 hrs – Auditorium, bldg 500*

Recent B-physics results with the CLEO II detector

by Soeren PRELL / University of California, San Diego

CLEO is beginning to observe signals in rare B meson decay modes, which are interesting for CP-violation measurements. I will report on recent measurements of branching fractions or upper limits for these modes. Some of the rare B decay modes will benefit from precision tracking with silicon vertex detectors. I will present the result of the first analysis with the new CLEO silicon vertex detector, the charm meson lifetime measurement, to show the capabilities of precision tracking at the Y (4S) energies.

Organiser : Fabiola GIANOTTI / EP Division

* Tea & coffee will be served at 16.00 hrs.

Vous pouvez aussi consulter

For information on these seminars, please see

<http://wwwas.cern.ch/Bulletin/Seminars/current.html>

Tuesday 31 March

LEP EXPERIMENTS COMMITTEE

Open session

at 09.00 hrs – Auditorium, bldg 500

Reports on the LEP machine:

09.00-09.45 Summary of the 1998 Chamonix Workshop
and Impact of LHC civil engineering on LEP
(John Poole)

LEP2 physics jamboree:

09.45-10.25 OPAL (Mark Thomson)

10.25-11.00 Coffee break

11.00-11.40 ALEPH (John Carr)

11.40-12.20 DELPHI (Klaus Moenig)

12.20-13.00 L3 (Joachim Mnich)

13.00-14.30 Lunch

LEP working group reports:

- 14.30–14.50 Combined electroweak results from LEP and other accelerators (*Christoph Paus*)
14.50–15.10 QCD (*Roger Jones*)
15.10–15.40 LEP2 energy calibration (*Pippa Wells*)
15.40–15.55 LEP archive (*David Stickland*)

CLOSED SESSION: Tuesday 31 March 1998 at 15.55 hrs, 6th floor Conference Room

Tuesday 31 March

COMPUTING COLLOQUIUM

at 09.30 hrs – Council Chamber, bldg 503

An overview of Workflow Management: From Process Modelling to Workflow Automation

by Amit SHETH / Director, Large Scale Distributed Information Systems Lab, University of Georgia

Today's enterprises with increasing global exposure must quickly react to the changes, rapidly develop new services and products, manage long running complex operations, and at the same time improve productivity and quality while controlling expenses.

Organizational or business process modelling and subsequent workflow automation to co-ordinate activities throughout the enterprises (and increasingly, across multiple enterprises) are recognized as important emerging technologies to support these requirements.

In this talk, we will review the basics of process and workflow modelling, architectures and features of workflow management systems, and state-of-the-art in research and commercial products. We will discuss how workflow management can support "programming in the large" and co-ordination involving both humans and information systems. (Please note that there will be a more detailed follow-up of this subject at 11 o'clock in 40-SS-D01).

About the speaker:

Amit Sheth directs the Large Scale Distributed Information Systems (LSDIS) Lab, is an Associate Professor of Computer Science at the University of Georgia, and the President of Infocsm, Inc.

Earlier he worked for nine years in the R&D labs at Bellcore, Unisys, and Honeywell. His primary current research interests include work collaboration and co-ordination systems (incl. METEOR workflow management system and CaTCH collaborative teleconsulting system), management of heterogeneous digital data and semantic issues in global information systems (InfoQuilt system), information brokering and electronic commerce. Several of the research projects he has lead have resulted in technology transfer and commercial products.

Tuesday 31 March

TECHNICAL PRESENTATION

at 11.00 hrs – bld. 40, Room SS/D01

An overview of Workflow Management: From Process Modelling to Workflow Automation (Part 2)

by Amit SHETH / Director, Large Scale Distributed Information Systems Lab, University of Georgia

After having reviewed the basic features of workflow management in the Colloquium, in this second session, we will look at the details of the METEOR multiparadigm workflow management system, which is both an ongoing research

system as well as a system that is licensed for commercial use. In particular, we will demonstrate advanced features of comprehensive graphical design, automatic code generation, distributed scheduling, scalability and support for dynamic features, using the example of a real world distributed multi-enterprise workflow application development. We will end the talk with a discussion of relevance of workflow in the context of large scale assembly and manufacturing operations, which will lead us to a discussion of relevance to PDM systems and complementary research in the projects such as CRISTAL.

Information: Bertrand Rousseau (IT/IPT)

Tuesday 31 March

DUALITY WORKSHOP

at 14.00 hrs – TH Conference Room, bldg 4

M-theory and U-duality on T^d with gauge backgrounds - Part I

by Niels OBERS / CERN - TH

An introduction to M-theory is given, focusing on the full U-duality group of toroidally compactified M-theory. U-duality invariant mass formulae for BPS states are obtained for compactifications on non-rectangular tori with expectation values of the gauge fields. The interpretation of these states both from the M-theory and string theory point of view is discussed as well as some applications. We also give a brief review of the Matrix theory description of M-theory and interpret the U-duality invariant mass formulae from the point of view of Matrix gauge theory. A number of related issues in matrix theory, including topological theta terms, extended U-duality symmetry and Nahm-type dualities, are also discussed.

Mardi 31 mars

PRESENTATION TECHNIQUE

CONFÉRENCE AVEC DÉMONSTRATION

14.00 - 16.00 h – bât. 14/4-030

La génération future de connectique carte/backplane

par Christoph PREM / Product Manager, Siemens

Thème:

- Survol de l'évolution de la connectique actuelle.
- Densipac: la connectique carte/backplane CMS première mondiale avec une densité allant jusqu'à 576 contacts par 100 mm de longueur. Côté carte toujours CMS, côté backplane à choix entre CMS et sertissage
- Speedpac: pour la transmission de données jusqu'à 5Gbit/s. Système pour transmission simple et différentielle à impédance constante. Un mécanisme simple permet l'enfichage et l'extraction des cartes sans force.

Langue : anglais

Information : L. Abel / SPL-PS/79561

Tuesday 31 March

CERN HEAVY ION FORUM

at 14.30 hrs – Conference Room, bldg 160-1-009

Wavelet analysis and pattern recognition in high multiplicity events

by Igor DREMIN / Lebedev Physical Institute, Moscow

This talk is dedicated to Maurice Jacob on the occasion of his retirement from CERN.

A wavelet analysis of high multiplicity events is proposed and applied to the Pb-Pb data at 158 GeV/nucleon of the EMU-15 collaboration.

The different patterns revealed by this technique are discussed (minijets, jets, fractals, rings, etc). Further extension of the method is proposed. Elliptical flow is also discussed, as a result of the quantum sling-effect.

Wednesday 1 April

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room, bldg 4

Exact chiral symmetry on the lattice

by Martin LÜSCHER / DESY

Until recently the general belief has been that chirally symmetric field theories cannot be put on the lattice without breaking the symmetry or having more fermions in the continuum limit than intended. The celebrated Nielsen-Ninomiya theorem states that this is in fact unavoidable if a few plausible assumptions are made. A simple way to overcome this difficulty has now been found and will be explained in the talk. The key observation is that the Nielsen-Ninomiya theorem can be bypassed if we do not insist that the chiral transformations assume their canonical form on the lattice. The theories discussed include QCD, chiral Yukawa models and chiral gauge theories.

Thursday 2 April

FORUM ANSYS

10.00-12.00 – LHC Auditorium, bldg 30

General presentations on support policy and some general interest technical issues

14.00-17.00 – bld. 40, Room SS/D01

Three one-hour discussions on precise subjects (waiting for your specific wishes)

You are an ANSYS user? The CoSAC (Computational Analysis Committee) has invited some experts of the ANSYS Corporation support team to present tips on various subjects. This meeting will also allow CERN ANSYS users to meet themselves and build some contacts.

Issues such as “Who is the CERN ANSYS support?”, “How to improve its computer performance?”, “Is ANSYS able to import efficiently CAD models and how to proceed?”, etc. will be treated.

Information: gregory.lucas@cern.ch

Thursday 2 April

DUALITY WORKSHOP

at 14.00 hrs – TH Conference Room, bldg 4

M-theory and U-duality on T^d with gauge backgrounds - Part II

by Niels OBERS / CERN - TH

Continuation of the lecture given in the Duality Workshop on 31.3.98

Thursday 2 April

SL SEMINAR

at 16.00 hrs* – SL Auditorium, bldg 864

A New Method of RF Power generation for Two-Beam Linear Colliders

by Ronald RUTH / Stanford Linear Accelerator Center and CERN)

During the past several years the CLIC study for a 30 GHz linear collider has developed methods for generating and manipulating the drive beams which can be used in a Two-Beam accelerator to power the main linac. In particular, in the multi-beam scheme, the drive beam is a sequence of trains of electron bunches separated in time so that the drive bunches arrive at each section of the linac at the same time as the high energy beam. To create the high bunch frequency within each group, RF deflectors are used together with an electron storage ring, to overlap different time segments of the beam to achieve both energy compression as well as an increase in the bunch repetition frequency. Thus, the required input drive beam is an essentially continuous beam with a pulse length equal to twice the length of the linac. It will be shown that it is possible to create such a drive beam with a low frequency (625 MHz) conventional pulsed linac that is heavily loaded and extremely efficient. This type of ‘two beam’ RF system should be very reliable and quite inexpensive. The method also works for main linacs that use a different frequency RF system, and it is easily upgradable without major modifications to cover colliding beam energies from 0.5 TeV to 5.0 TeV using various acceleration gradients, RF frequencies and linac lengths.

* Tea and coffee will be served at 15.30 hrs in front of the Auditorium

Friday 3 April

IT TRAINING TUTORIAL

10.00-12.00 hrs - IT Auditorium, bld. 31/3-004

Windows 95 Basics

by Raul RAMOS POLLAN / CERN-IT

A practical introduction for people novice to the Windows 95 world. I will present the basic elements of the system and show the minimum operational skills in order to start working with it. The talk will provide participants with the essential information to comprehend the use of the desktop, execute applications, view resources and manage files. No previous knowledge is required.

Information: <http://wwwinfo.cern.ch/support/training>

Organisers: M.Marquina and R.Ramos /IT-User Support

Monday 6 April

TECHNICAL PRESENTATION

at 09.00 hrs – bldg.31, Auditorium IT

PC Automation with BridgeVIEW

by Deepika Aurora, BridgeVIEW Software Engineer, National Instruments Stefano Zanetti, Application Engineer, National Instruments

This seminar consists of extensive demonstrations of BridgeVIEW, the innovative HMI/SCADA package from National Instruments, and techniques for developing industrial automation applications. It is also an informative session on key technologies that are shaping the industry today. You will have the chance to talk directly with a software engineer from BridgeVIEW development team.

Agenda

- 09.00 hrs Introduction
- 09.10 hrs BridgeVIEW architecture - Steps for building a BridgeVIEW application
- 09.45 hrs Connectivity and I/O - OPC
- 10.15 hrs Break
- 10.30 hrs Networking - TCP server, Internet toolkit
- 11.00 hrs Connectivity to other products - ActiceX, HiQ

11.20 hrs VI based server - writing your own BridgeVIEW server
11.40 hrs BridgeVIEW future - Conclusion

Monday 6 April

EP SEMINAR

at 16.30 hrs - Auditorium*, Bldg 500

The W-boson mass by direct reconstruction at LEP.

by Frederic TEUBERT / CERN - EP Division

The W-boson mass is one of the fundamental parameters of the Standard Model. Its precise measurement allows to test the consistency of the SM predictions and constrains the mass of the undiscovered Higgs boson. In this talk, I review the procedure to determine the W-boson mass from the reconstructed invariant mass distributions. The difficulty of the measurement consists in the control of the systematic uncertainties, both at the detector level and at the theoretical level. The talk is based on the ALEPH analysis although the four LEP experiments use very similar techniques.

The precision achieved by the four LEP experiments already now is at the same level as the W-boson mass determination from the Tevatron, and the world average, with a precision of 64 MeV, starts to become comparable to the indirect determination of the W-boson mass from loop corrections.

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

Organiser : Fabiola Gianotti / EP Division

Jeudi 9 avril

SÉMINAIRE EDMS

à 10.00 hrs - Amphithâtre LHC, bâtiment 30

Présentation du CERN Drawing Directory (CDD)

par Stephan PETIT / CERN - EST/ISS

CDD est un outil s'intégrant dans le projet EDMS (Engineering Data Management System). Depuis mai 1996, il est utilisé pour archiver et faire circuler les plans techniques utilisés au CERN et dans les instituts associés. Cette présentation exposera de manière générale les fonctions de CDD, suivant le plan décrit ci-dessous :

- Introduction (aspects de la gestion des plans)
- Fonctions
 - Enregistrement de plan
 - Liens avec les outils CAO
 - Contrôles qualité (signatures électroniques)
 - Archivage
 - Recherche et visualisation
 - Circuits d'approbation
- Démonstration
- Questions / réponses

Pour plus d'informations, consultez le web :
<http://www/lhc01.cern.ch/cdd/>

Thursday 9 April

LHC PROJECT SEMINAR

at 14.15 hrs - LHC Auditorium, bldg 30/7th floor

Genetic optimization algorithms for the conceptual design of superconducting magnets

by S. Ramberger and S. Russenschuck / LHC Division

Tuesday 14 April

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs - Auditorium, bld. 500*

Variation of cosmic ray flux and global cloud coverage

by Henrik SVENSMARK / Solar-Terrestrial Physics

Division, Danish Meteorological Institute, Copenhagen

Organiser : Jasper Kirkby / EP Division

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

Thursday 16 April

CERN COLLOQUIUM

at 16.30 hrs - Auditorium, bld. 500*

Climate Variability and Change

by Hartmut GRASSL / World Meteorological Organization, Geneva

Organiser : Luigi Di Lella / EP Division

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

POUR INFORMATION / FOR INFORMATION

UNIVERSITY OF GENEVA

Particle Physics Department

24, quai Ernest-Ansermet

1211 Geneva 4

Tel. 022 702 6273, Fax 022 781 2192

Wednesday 1 April

SEMINAR ON PARTICLE PHYSICS

at 17.00 hrs - Auditorium Stückelberg

Recent Results from NuTeV/CCFR

by Jaehoon YU / Fermilab

The NuTeV/CCFR experiment is a neutrino-nucleon deep inelastic scattering experiment at Fermilab. The NuTeV experiment took data in 1996-97 Fermilab fixed target run, using a Sign-Selected-Quadrupole-Train, which enabled the experiment to choose either neutrino or anti-neutrino beam at a given running period. The use of sign selection is expected to help reducing systematic uncertainties in the electroweak mixing angle measurement.

LAPP - Laboratoire d'Annecy de physique des Particules
F74941 - Annecy-le-Vieux

Informations : Pascal Perrodo, tél. 04 50 09 16 00

Vendredi 3 Avril

SEMINAIRE SUR LA PHYSIQUE DES PARTICULES

à 14.00 hrs - Amphithâtre du LAPP

Le Boson W à LEP2 : mesure de sa masse et physique électro-faible.

par Helenka Przysiezniak (CEA, Saclay)

La phase 2 de l'accélérateur LEP permet depuis déjà deux ans de produire des paires de W et d'en étudier les propriétés dans le cadre du modèle standard (MS) et de son extension supersymétrique, le MSSM. La méthode de mesure de la masse du W dans ALEPH sera décrite, qui est basée sur un ajustement de distributions de masse invariante d'événements Monte-Carlo repondérés à la distribution des données. Cette analyse utilise les données prises à 172 GeV

et 183 GeV. Les méthodes utilisées par les autres collaborations LEP seront également présentées ainsi que le résultat combiné. Cette mesure sera ensuite placée dans le contexte du modèle standard où les principaux résultats seront présentés, en particulier les implications sur les masses du quark top, du boson de Higgs MS ou MSSM et sur l'angle de Weinberg.

ACADEMIC TRAINING ENSEIGNEMENT ACADEMIC

F. Benz Secretariat ☎ 73127
francoise.benz@cern.ch

Vous êtes membres du personnel titulaire, boursiers ou attachés dans les catégories professionnelles 1 et 2 avec un contrat à 50% et plus. Vous avez reçu le questionnaire pour la préparation du Programme Académique 98-99.

Votre avis nous intéresse.

Nous vous demandons de renvoyer ce questionnaire **avant le 31 mars 1998** aux responsables des groupes de travail concernés.

Merci d'avance pour votre coopération.

You are Staff Members, Fellows or Associates in professional category 1 and 2 with a contract at 50% or more. You have received the questionnaire for the preparation of the Academic Training Programme 98-99.

Your advice will help us.

Could you please return this questionnaire, before the **31 March 1998** to the Chairpersons of the Working Groups concerned.

Thank you in advance for your cooperation.

1998 CERN Training Plan

The **French** version of the 1998 CERN Training Plan is now available upon request.

Anyone interested may obtain a copy from :
- N. Dumeaux / Education Services, by e-mail or tel. 78144.

The text is also available on the World Wide Web -
http://www.cern.ch/Training/INTRO/CTP98_F.html.

EDUCATION SERVICES EDUCATIFS



Information sur les cours, dates et places disponibles sur WWW:
Information about the courses, dates and places available on WWW :
<http://www.cern.ch/Training/>

ACADEMIC TRAINING ENSEIGNEMENT ACADEMIC

F. Benz Secretariat ☎ 73127
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LECTURE SERIES FOR POSTGRADUATE STUDENTS

30, 31 March, 1, 2 & 3 April

11.00 to 12.00 hrs

Auditorium 30 March, 1, 2 & 3 April

Council Chamber 31 March

Particle Detectors

by C. Joram, CERN-EP

The lecture series will present an overview of the basic techniques and underlying physical principles of particle detectors, applied to current and future high energy physics experiments. Illustrating examples, mainly from the field of collider experiments, will demonstrate the performance and limitations of the various techniques.

After an introduction we shall concentrate on particle tracking. Wire chambers, drift chambers, micro gaseous tracking devices and solid state trackers will be discussed. It follows an overview of scintillators, photon detection, fiber tracking and nuclear emulsions. One lecture will deal with the various techniques of calorimetry. Finally we shall focus on methods developed for particle identification. These comprise specific energy loss, time of flight, Cherenkov and transition radiation detectors.

Plan de formation du CERN 1998

La version **française** du Plan de Formation du CERN 1998 est disponible sur demande dès maintenant.

Toute personne intéressée peut en obtenir une copie auprès de:
- N. Dumeaux / Services Educatifs par e-mail ou par tél. 78144.

Le texte est disponible sur World Wide Web -
http://www.cern.ch/Training/INTRO/CTP98_F.htm.