

fiche de transfert (sauf arrangement particulier entre le CERN et les douanes). En cas d'inobservation de cette règle, les contrevenants risquent des sanctions sévères de la part des douanes sans que l'Organisation puisse intervenir.

Par conséquent, le passage des marchandises doit se faire obligatoirement par le tunnel au moyen d'une fiche de transfert dûment remplie et signée par un membre du personnel du CERN, en aucun cas par un employé d'entreprise.

Par ailleurs, il est rappelé aux utilisateurs de cette voie de passage qu'il n'est pas permis de l'emprunter pour aller au travail ou en revenir, ni pour gagner son domicile aux heures de déjeuner.

Relations avec les Pays-hôtes
Tél. 5152

SEMINARS SEMINAIRES

Tuesday 9 June

LEP EXPERIMENTS COMMITTEE

Open session

at 09.00 hrs – Auditorium

09.00 - 09.30 Report on LEP

Status Reports on the Experiments

09.30 - 09.50 OPAL

09.50 - 10.10 L3

10.10 - 10.40 Coffee Break

10.40 - 11.00 ALEPH

11.00 - 11.20 DELPHI

11.20 - 11.50 Background Studies for LEP200 (G. von Holtey)

11.50 - 12.20 An Upgrade of DELPHI in the Forward Region (LEPC 92-5/I 11)

12.20 - 12.50 Proposal for the Replacement of the Very Forward Calorimeter of DELPHI (LEPC 92-6/P2 Add. 1)

Closed session

on 9 June, at 14.00 hrs – Salle B, Main Building,
bldg 61, 1st floor

Tuesday 9 June

PRESENTATION

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

CES hardware as building blocks for data acquisition systems in physics

by F.-H. Worm & A. Lounis / Creative Electronics Systems S.A.

have been made between CERN and the customs authorities). Failure to observe this rule may result in the offender incurring a heavy penalty, without the Organization being able to intervene.

Goods must be therefore moved only through the tunnel, with a transfer slip properly completed and signed by a member of the CERN staff, never by the employee of a firm.

Tunnel users are also reminded that it may not be used for going to or from work or for commuting to and from home during lunch hour.

Relations with the Host States
Tel. 5152

The demonstration will present CES hardware as building blocks for data acquisition systems in physics. We will show how different popular bus systems (VMEbus, CAMAC and Fastbus) can be integrated with powerful processors into versatile and scalable online systems. The next generation of fast intelligent controller, the FIC8234, based on two MC68040 processors, will be presented as a smooth transition from the well known MC68030-based FIC8232, but with a significant improvement of performance and functionality. The demonstration will include:

- A VMEbus system consisting of FIC8232 and FIC8234 processor modules, a CBD8210 CAMAC branch driver, a VIC8250 VMEbus crate interconnect, an HSM8170 high speed triple port memory for interfacing to the Lecroy ECL bus and a DSK8133 compact VMEbus disk subsystem.
- A CAMAC crate containing a VCC2117 intelligent VICbus to CAMAC Controller module with CCA2 functionality.
- A Fastbus crate containing the FVSBI, VSB to Fastbus interface.

Information : C. Parkman / ECP / 3963 / pmn@cernvm

Tuesday 9 June*

COMPUTING SEMINAR

at 10.30 hrs – Council Chamber

Exactly what is a computer virus?

by Eugene H. Spafford / Purdue University

In the last five years, we have seen an explosion in the incidence of malicious software –most notably, computer viruses and worms. However, despite their spread, many people are unfamiliar with what a computer virus really is or how it operates. As a result, they are unaware of simple measures they can take to prevent viruses. This presentation describes what a computer virus is, how it operates, and some simple defenses against them. A brief history of viruses and notable virus events will be presented, along with some information on how to tell computer viruses from computer worms, and why it makes a difference. Some trends in computer viruses are clear, and these will also be discussed. The talk is accessible to people with a minimal computing background.

Gene Spafford ('Spaf') received his PhD from Georgia Tech in 1986, and has been Assistant Professor of Computer Sciences at Purdue University since 1987. He is also an active researcher with the Software Engineering Research Center (SERC) there. He is coauthor of the books 'Practical Unix Security' (1991), and 'Computer Viruses: Dealing with Electronic Vandalism and Programmed Threats' (1989), as well as a developer of the COPS security checker program for Unix – a tool used world-wide for assistance in the management of system security and which is currently under study in CERN with a view to making it part of a security package to be offered to workstation owners.

Organizers : N. Cremel / CN & A. Silverman / CN

* Please note unusual day, time & place!

Wednesday 10 June

PRESENTATION

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

Document management based on imaging technology

by Paul Hennessey / Systems Integration Business Manager, Oracle Corporation

Intelligent document management by computer using the latest imaging technologies can provide major benefits for large organizations in terms of cost savings, improved quality, and reduced clerical effort. By integrating access to all project data whether in the form of paper, faxes, drawings or computer based files, end-users from many different areas are presented with timely, accurate and consistent information. The presentation highlights the main driving forces behind the introduction of image technology, and the difficulties that have to be overcome in order to achieve successful implementation. The primary requirements of a "workflow management" system are identified, covering case-folder management, rules-based processing, information transfer, workload management and management information handling. The major components of an Oracle-based imaging system are discussed, showing how the system can be used in a distributed environment and integrated with existing systems. The talk concludes with some examples of Oracle's experience of implementing integrated image solutions in various business sectors including Engineering, Government, Finance, Law Enforcement.

Organizer: G. Moorhead / CN

Wednesday 10 June

PS SEMINAR

at 11.00 hrs – PS Auditorium

The PS Linac, 1956 to 1973

by C.S. TAYLOR / CERN-PS

In celebration of the closing down of Linac1 in May 1992, this seminar will be devoted to a recollection of its construction years until start-up in 1959, and of its subsequent development into the highest intensity operation proton linac in the late 1960's, followed by its preparation for long-pulse injection

into the Booster. The talk will describe scientific and technical aspects of the machine, and endeavour to convey some idea of how we saw the problems and challenges at the time.

Wednesday 10 June

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

The chiral anomaly in non-leptonic weak interactions

by Gerhard ECKER / CERN & University of Vienna

After a brief introduction to chiral perturbation theory, the implementation of the chiral anomaly in the strong effective action is reviewed. In the main part of the talk, the manifestation of the anomaly in the effective chiral Lagrangian for the non-leptonic weak interactions is discussed. It is emphasized that the chiral anomaly can and should be tested experimentally both in semi-leptonic and in non-leptonic (radiative) K decays.

Thursday 11 June

PRESENTATION

at 11.00 hrs – bldg 29/1-001

Theory and performance of Advanced Photonix bevelled edge avalanche photodiodes

by Shawn S. FAGEN / Advance Photonix, Inc.

Large area avalanche photodiodes (APDs) of the bevelled design have been the subject of laboratory testing and invention for more than 25 years. However, widespread use of these devices has not been possible because of poor stability and low production yield. Advanced Photonix, Inc. has developed the capability to produce stable bevelled APDs in monolithic and array form with high yield, large areas, and dark current in the vicinity of 2 nA per square mm for the unmultiplied component, and 0.5 nA per square mm for the avalanche component. Recent gains of 5000 have been achieved. Widespread applications as an alternative to competing photodetectors, such as large area PIN photodiodes, and PMTs are now possible. With further development, API can achieve thousand-pixel arrays in sub-millimeter dimensions. Each detector element will cost orders of magnitude less than PMT active areas. Since these APDs can also detect electrons, gamma rays and x-rays, there will be civilian breakthroughs for PET scanning, optical and scintillating fiber readout and crystal readout of high energy physics detectors.

The speaker will be available from discussions on June 11th and 12th at office 29-1-025, telephone 8154.

Information : Riccardo DeSalvo / 7590

Friday 12 June

ECFA EUROPEAN COMMITTEE FOR FUTURE ACCELERATORS

at 09.30 hrs – Council Chamber

- 09.30 1. *Approval of the Draft Minutes of the Fiftieth Plenary ECFA Meeting*
 2. *Approval of the Draft Agenda*
 3. *Chairman's Report*
 4. *High Energy Physics Programme in the US (S. Wojcicki)*
- 11.00 *Coffee*
 5. *Status of HERA (V. Soergel)*
 6. *Election of ECFA Chairman*
Lunch
- 14.00 7. *CERN Fellowship Programme (P. Darriulat)*
 8. *Status and Projects of IHEP Protvino (L. Soloviev)*
 9. *Status of LHC (G. Brianti)*
 10. *Discussion*
 11. *Any Other Business*
- 16.30 *End of meeting*

Monday 15 June

SEMINAR

Organized by the Center of Quantum Philosophy of Geneva (CQPG)*

at 12.00 hrs – TH Conference Room

Quantum-mechanical evolution and Hilbert-space structure

by Milos Lokajicek / Institute of Physics of Czech Academy of Sciences

Time-dependent Schroedinger equation is commonly regarded as the basic quantum rule and practically as the only one. In fact the current quantum-mechanical mathematical model starts from two different assumptions:

- all possible states of a given physical system are represented by vectors of a Hilbert space which is spanned on eigenfunctions of the corresponding Hamiltonian;*
- time-evolution is established with the help of the time-dependent Schrödinger equation.*

It will be argued that the first assumption does not correspond to physical reality if changing characteristics of a time-evolving system are to be described. Arguments will be given that the actual Hilbert space must be doubled. Some important physical characteristics following from the considered extended quantum-mechanical model will be presented. Properties required by an ensemble interpretation are fulfilled.

* **Center of Quantum Philosophy of Geneva (CQPG)** aims to promote the discussion on the philosophical and scientific challenges raised by the interpretation of the quantum theory and of the information theory, and particularly by the principles of **nonlocality, indeterminism and undecidability**. The CQPG addresses itself to people who think that quantum theory is not only a practical summary of mathematical recipes, but that it is now an integral part of knowledge and culture.

Monday 15 June*

COMPUTING SEMINAR

at 14.00 hrs – CN Auditorium
 bldg 31/3-005

DIANE Standard Installation system for PCs

by Ian MITCHELL / CN-CE

Over the past few months at CERN increasing numbers of PCs have been running the DIANE Standard Installation system. Since the advent of the NICE fileserver topography, DIANE is now going to be installed on virtually every networked PC at CERN. This has been made feasible by the standard fileserver drive mappings that NICE provides. It is no longer necessary that DIANE installation routines be put on every fileserver; it is now possible for the DIANE installation to be downloaded from a central Hyperserver (or mirrored Hyperserver cluster). In essence, the DIANE-NICE environment enables every PC and fileserver to be configured in a standard way, with standard key applications, boot files, and directory structure. This will make user support a lot easier and it will make conflict free inter-server migration possible. A standard Windows 3.1 version is a key feature of the new environment. Everyone who uses a networked PC at CERN is welcomed to attend this seminar.

* Please note unusual day & time!

Monday 15 June

PPE SEMINAR

at 16.30 hrs – Auditorium

Electroweak results from CDF

by Young Kee-Kim / LBL-CDF

We have studied electroweak physics from $p\bar{p}$ collisions at a centre-of-mass energy of 1.8 TeV with the 4 pb^{-1} data accumulated by CDF during the 1988-1989 run. We have determined $M_W = 79.91 \pm 0.39\text{ GeV}/c^2$ from an analysis of $W \rightarrow e\nu$ and $W \rightarrow \mu\nu$ data; using this an upper bound on the top-quark mass has been derived. The branching ratio of $W \rightarrow l\nu$, the W width, and a decay-mode independent lower bound on the top-quark mass have been deduced from measurements of the W and Z production cross sections and rates for decay into leptons. We have also measured the charge asymmetry of leptons in W decays, the forward-backward asymmetry in Z decays, and have searched for heavy gauge bosons, Z' and W' . A very recent result sets lower limits on leptoquark mass. The prospects for the 1992 run are discussed.

Mardi 16 juin

PRESENTATION TECHNIQUE

09.00–12.30 h & 13.30–17.00 h – bât. 73/2-027

Kontron Elektronik AG (D/CH) propose en démonstration six produits de sa gamme de PCs industriels.

Langue : français

Renseignements : M. Diraison /FI / 4585

Tuesday 16 June

CERN COLLOQUIUM

at 16.30 hrs – Auditorium

A high sensitivity search for a 17 keV neutrino

by J. SHIRAI / Institute of Nuclear Study Tokyo University

* Tea & coffee will be served at 16.00 hrs

Wednesday 17 June*

PPE SEMINAR

at 11.00 hrs – Auditorium

CLEO's Beauty : recent B-results from CLEO-II

by Gerald EIGEN / Caltech

* Please note unusual day & time!

Wednesday 17 June

CERN COMPUTING COLLOQUIUM

at 16.30 hrs – Auditorium

The Computing Universe

by Konrad ZUSE

Thursday 18 June

DETECTOR SEMINAR

at 11.00 hrs – TH Conference Room

The SDC muon system

by Henry Lubatti / SSCL

Thursday 18 June

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium

First results of the GALLEX solar neutrino experiment

by Michel SPIRO / SACLAY

Friday 19 June

OPEN INFORMATION MEETING ON MASSIVE PARALLEL PROCESSING IN HEP

at 10.00 hrs – CN Auditorium

bldg 31/3-005

The meeting starts at 10.00 hrs to allow interested people to attend the Fortran 90 course by M. Metcalf.

10.00-10.30 *Welcome and introduction of LHC computing issues, PG. Innocenti.*

10.30-11.00 *Computer farming vs MPP (from CORE to*

the Teraflop), Les Robertson.

11.00-11.30 *ESPRIT and MPP, CERN experience so far, Bob Dobinson.*

11.30-12.00 *Review of MPP technology and market offering, F. Gagliardi.*

12.00-12.30 *MPP programming techniques and paradigms, I. Willers.*

12.30-14.00 *Lunch break.*

14.00-14.30 *Applications of MPP in Theoretical Physics, U. Wolff.*

14.30-15.00 *Possible applications of MPP to simulation and data analysis, F. Carminati.*

15.00-15.30 *MPP at LHC, S. Cittolin.*

15.30-16.00 *Coffee break.*

16.00-16.30 *Accelerator design and control applications, G. Shering.*

16.30-17.30 *Panel discussion chaired by David Williams, panel members : R. Bock, F. Carminati, B. Dobinson, M. Metcalf, R. Mount, A. Norton, L. Robertson.*

Wrap-up by D.O. Williams.

Information: Fabrizio Gagliardi / CN / Fab@vxcern.cern.ch

Friday 19 June

DETECTOR SEMINAR

at 11.00 hrs – ECP Conference Room

bldg 13/2-005

Properties of CsI and CaI-TMAE Photocathode

by David Anderson / FermiLab

EDUCATION SERVICES EDUCATIFS

ENSEIGNEMENT GENERAL

Tél. 5811

Jeudi 11 juin

à 13.00 h – Amphithéâtre

Science pour tous

par Rafel CARRERAS