

SEMINARS SEMINAIRES

Monday 20 September

ORACLE DEVELOPERS TECHNICAL SESSION

14.00-16.00 hrs * – IT Auditorium, bldg 31/3-004

QUEST Software Products

- Overview Quest's current product palette.
- SQLAB Expert presentation.
PL/SQL Application tuning: why is response time poor?
It will point the exact SQL commands using most of the system's resources, show the best alternatives, and create appropriate SQL itself.
- SQLLAB Expert interface to SQL IMPACT.
- SQL IMPACT presentation.
Year 2000 impact analysis with automatic creation of E-R diagrams. For a change in a table, IMPACT will tell which programs/procedures are affected, and vice-versa. Also Year 2000 "detect and correct" functionality to debug millennium problems.
- Questions

Information: <http://www.lhc01.cern.ch/odf/techs/techs4.html>

Organiser: Pedro Martel/EST-ISS

* Please note the unusual hours

Monday 20 September

PLENARY MEETING OF THE EUROPEAN MUON STUDY GROUP

at 14.00 hrs – PS Auditorium, bldg 6/2-024

0. Introduction by the Chairman - *Yves Déclais*
1. Current thinking on muon storage rings and colliders - *Alain Blondel*
2. Neutrino factory and muon collider in the US - *Harold Kirk (Brookhaven)*
3. Progress reports:
 - R&D at CERN on muon machines - *Helmut Haseiroth et al*
 - R&D at RAL on muon machines - *Rob Edgecock*
 - Neutrino beams and experiments - *JJ Gomez-Cadenas*
 - Radiation issues for nuFact - *Friedrich Dydak*
4. Future activities:
 - a. Presentation of Muon Collider Working Group - *Patrick Janot*
 - b. Presentation of Working group on Physics opportunities with intense muon and neutrino beams - *John Ellis*
5. AOB: Suggestions welcome

Tuesday 21 September

CELEBRATION OF LEV OKUN'S 70TH BIRTHDAY

from 14h00 to 16h15 – Main Auditorium, CERN

Programme

- | | |
|---------------|---|
| 14h00 — 14h15 | L. Maiani
Welcome |
| 14h15 — 14h45 | J. Iliopoulos (ENS, Paris)
The Cosmological Constant |
| 14h45 — 15h15 | N. Cabibbo (Univ. La Sapienza, Rome)
Quark Mixing |
| 15h15 — 15h45 | D.H. Perkins (Univ. of Oxford, UK)
(title to be announced) |
| 15h45 — 16h15 | J. Ellis (Theory Division, CERN)
CP, T and CPT Violation |

Vous pouvez aussi consulter

For information on these seminars, please see

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

Tuesday 21 September

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium, bldg 500*

ANTARES : an undersea neutrino telescope

by John CARR/ CPP Marseille

The ANTARES collaboration is building a neutrino telescope at a depth of 2400m in the Mediterranean Sea offshore from Toulon in France. Since 1996 the collaboration has performed R&D and site measurements to develop the technology necessary to build a telescope based on Cherenkov light detection in a marine environment. This first stage is now successfully completed and the results will be presented. Work is now starting on the construction of a detector of effective area 0.1 square kilometres to be deployed in the sea in 2002-2003. A detector of this size can search for sources of high energy neutrinos such as the galactic centre, active galactic nuclei and gamma ray bursts. Relic neutralinos captured in the earth, sun and the galactic centre would give distinctive signals of neutrinos in the detector. The same detector is also suitable to measure atmospheric neutrino oscillations in the range of mixing parameters indicated by the SuperKamiokande experiment.

Organiser : Jasper KIRKBY / EP Division

* Tea & coffee will be served at 16.00 hrs.

Mercredi 22 Septembre

10.00-12.00 hrs – Amphithéâtre IT / 31-3-005

Présentation Accel 15 (logiciel de conception de circuits imprimés)

Par Nicolas Boudot / Accel Technologies, France et
Gérard Schnell / Connexe SA, Suisse

- Copie "intelligente"
Copie de block depuis le presse-papiers - ou d'un fichier - avec identification des nets communes, incrémentation des repères topologiques (RefDes) et/ou des noms des nets.
- Recherche facilitée des erreurs
Un "error finder utility" vous permet d'accéder aux erreurs - ou aux warnings - selon une configuration personnelle. Une fonction Jump to vous fera gagner un temps précieux.
- Dynamic rats nets...(PCB)
Les connections sont dynamiquement optimisées lors du placement ou du déplacement des composants.
- Arcs dans les polygones (PCB)
Possibilité de créer des arcs dans les angles des polygones - y compris Copper pours, cutouts, keepouts etc.
- Précision étendue à 1 micron!
En unité métrique, l'unité de base peut atteindre 0.001mm (+ 1 digit). Cette précision peut être reportée dans les fichiers Gerber.
- Undo - redo - multiples (et programmable)
- Liste de matériel avec critères de tris...+ offset pour les données numériques (fabrication).

Organisation: Chris Eck IT/CE

Wednesday 22 September

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room, bldg 4

Chiral symmetry breaking in QCD and Ginsparg-Wilson fermions

by Laurent LELLOUCH / CERN-TH

A natural candidate for studying the non-perturbative phenomenon of spontaneous chiral symmetry breaking in QCD is the numerical simulation of QCD on a spacetime lattice. This phenomenon, however, confronts the lattice approach with a twofold challenge. The first problem is that spontaneous symmetry breaking does not occur in a finite volume. We circumvent this problem by performing a finite-size scaling analysis which involves placing the system in a large enough box and confronting the dependence of the quark condensate on volume and quark mass to predictions from chiral perturbation theory, as the limit of restoration of chiral symmetry is approached ($m \rightarrow 0$, V finite). Such a study, however, requires controlling the chiral behaviour of the theory well, which is difficult on a discrete spacetime. To address this second challenge, we turn to Ginsparg-Wilson fermions which have recently been shown to possess a continuum-like chiral symmetry.

Thursday 23 September

COMPUTING SEMINAR

at 10.30 hrs – IT Auditorium, bldg 31/3-005

High-Performance Data Intensive Distributed Computing

by Brian TIERNEY / LBNL

The Data Intensive Distributed Computing Group at LBNL has developed some distributing computing technologies that we feel could be extremely useful to the HENP community.

The first is the Distributed Parallel Storage System (DPSS), which provides cost effective parallel access to many disks, and is tuned for wide-area network access. We have demonstrated a HENP data analysis application with read and write speeds of up to 57 MBytes/sec over a OC-12 WAN using a 4 server DPSS system. Using a DPSS, an application can access remote data even faster than it can access data from a local disk, eliminating the need to copy data sets from the remote site before processing or visualizing it.

For more information, see: <http://www-didc.lbl.gov/DPSS/>

The second is The NetLogger Toolkit, which includes tools for instrumenting applications, tools for monitoring hosts and networks, and tools for collecting and visualizing monitoring data. Using these tools enables us to do end-to-end monitoring, and detailed performance analysis of every component in the system. This type of analysis is critical for obtaining performance in widely distributed systems.

For more information, see: <http://www-didc.lbl.gov/NetLogger/>

Organiser : G.Folger / IT

Thursday 23 September

THURSDAY SEMINAR

at 14.00 hrs – TH Conference Room, bldg 4

A quantum field theory warm inflation model that solves the cosmological puzzles

by A. BERERA / Vanderbilt University

Warm inflation is a cosmology in which inflationary expansion

is driven by a vacuum energy density component, and in addition there is a subdominant but non-negligible radiation energy density component. The radiation affects the density perturbations and can permit a smooth exit from the inflationary regime into the radiation dominated regime without an intermediate reheating period. I will first present a pedagogical review of both the cosmology and quantum field theory dynamics of warm inflation. Then a specific quantum field theory model will be discussed and solutions will be presented to the horizon, flatness and scalar density perturbation problems. Finally a string theory interpretation of this model will be discussed.

Thursday 23 September

POSTER SESSION

from 14.00 hrs to 17.00 hrs – Bldg 112/R-018

Posters for the 16th International Conference on Magnet Technology (MT16)

by Members of the LHC Division

The posters prepared by members of the LHC Division to be presented at MT16 (16th International Conference on Magnet Technology) to be held from September 26 - October 2, 1999, Florida (USA) will be displayed.

Ruediger SCHMIDT, CERN-LHC-ICP, tel. 75217

Thursday 23 September

SCIENCE AND SOCIETY

at 16.30 hrs – Auditorium, bldg 500*

The communication of scientific knowledge in society. The role of the media

by Winfried GÖPFERT / Freie Universität Berlin, Center of Science Journalism

Why should the media report on science — and how? Increasingly scientific influence is regarded as risky or even dangerous, for example nuclear power or genetic engineering. Societies have to decide on such issues and therefore people have to be informed about these kinds of science. And where science itself is under scrutiny, media have to provide arguments and room or time for discussion.

In that view the job of science journalism is not only to translate scientific speech into everyday language — as science journalism is often regarded. Science journalism also has to consider the context the man in the street is interested in.

These are two different goals science reporting has to address. And it is necessary to distinguish between the two levels of serving readers interests. Science journalists should orient themselves on journalistic rules, not scientific needs. And scientists should know that journalists are not the translators of scientists. The arising conflicts between scientists and Journalists will be discussed.

Organiser : James GILLIES / AS Division

* Tea & coffee will be served at 16.00 hrs.

Friday 24 September

IT INFORMATICS TUTORIAL

10.00-12.00 hrs – IT Auditorium, bldg 31/3-004

An Introduction to FrontPage

by Alberto PACE / CERN-IT

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

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

CANCELLED

Friday 24 September

CERN HEAVY ION FORUM

at 11.00 hrs – Conference Room 160-1-009

On cold and hot chiral symmetry breaking

by Sandra KLEVANSKY / Heidelberg, Germany

This talk focuses on two aspects of chiral symmetry, taken from both cold and hot chiral symmetry breaking.

- (a) At zero temperature, we focus on the charged pion polarizability, α_π , for which there is a large spread in both the theoretical and experimental values. We are able to give a unified and comparative approach for the various theoretical models via the Das-Mathur-Okubo sum rule. From the experimental point of view, more experiments are required for clarification.
- (b) For hot systems, we present a non-equilibrium evolution equation for quarks and mesons based on a chirally invariant Lagrange density. Several general features of phase transitions, such as critical scattering at the phase transition, can be observed in quark-antiquark cross sections. First toy simulations of collisions are shown.

Monday 27 September

DETECTOR SEMINAR

at 11.00 hrs – Conference room, bldg 13/2-005

Recent developments in very high time resolution RPCs

by P. FONTE / CERN-EP & LIP-Coimbra, Portugal

Recent developments in electronics and detector construction techniques and materials have pushed the time resolution of Resistive Plate Chambers below 50 ps sigma with efficiencies close to 99% for MIPs. The performance of several RPC configurations will be presented and their mode of operation discussed

Information: <http://www.cern.ch/CERN/Divisions/EP/Seminars/Welcome.html>

Organiser: Rui RIBEIRO / EP Division

Monday 27 September

ISOLDE AND NEUTRON TIME-OF-FLIGHT EXPERIMENTS COMMITTEE (ISTC)

Open session

at 14.00 hrs – Council Chamber

1. Welcome and Introduction; Hubert Flocard. (5 min)
2. A new role for the ISTC; Claude Détraz. (20 min)
3. The neutron Time-Of-Flight facility; N. Pavlopoulos. (20 min)
4. Summary of Audit report on the ISOLDE High Resolution Separator; N. Severijns. (10 min)
5. ISOLDE Technical Group Leader's report; Helge Ravn. (5 min)
6. ISOLDE Coordinator's report; Thomas Nilsson. (5 min)
7. nTOF Technical group leader's report; E. Radermacher. (5 min)
8. Decay study for the very neutron-rich Sn nuclides, $^{135-140}\text{Sn}$ separated by selective laser ionization (ISTC 99-19/P113); Bill Walters. (15 min)
9. Investigation of the single particle structure of the neutron-rich sodium isotopes $^{27-31}\text{Na}$ (ISTC 99-20/p114); Heiko Scheit. (15 min)

Closed Session

After the Open Session – 6th floor Conference room

Monday 27 September

CERN EP SEMINAR

at 16.30 hrs – Auditorium, bldg 500*

Status of the BaBar Detector.

by Stefan SPANIER / SLAC

The BaBar detector at the PEP-II ring at SLAC had a successful start and has recorded by the end of August an integrated luminosity of about 500/pb on the Υ (4S) resonance, 55/pb off the resonance. The maximum luminosity achieved during data taking was $0.81 \times 10^{33}/\text{cm}^2 \text{ s}$. The performance of the detector components will be discussed with emphasis on new concepts, in particular the innovative DIRC Cherenkov ring imaging detector. First physics signals will be shown.

Organiser : Fabiola GIANOTTI / EP Division

* Tea & coffee will be served at 16.00 hrs.

Tuesday 28 September

TECHNICAL PRESENTATION

09.00 - 17.00 hrs – Bldg 40 / RC-10

New Products and Timing Analysis Seminar

by LeCroy SA

New products presented include: Mid-range (Waverunner) and high-range (LC584) digital oscilloscopes, the LSA1000 digitizer on ethernet, analog oscilloscopes and modular instruments. Schedule:

10:00 - Coffee and refreshments

10:30 - Welcome

10:45 - Product overview (A. Hanselmann)

14:00 - Jitter and Timing Analysis Seminar (D. Locke)

The interactive seminar describes the applications of the JTA software package for design and testing of timing and clock circuitry (duration approx. 75 min).

Language: English, French, German

Information : S.SHEARER/SPL-PS/76360

Mercredi 29 Septembre

SÉMINAIRE

à 14 hrs – Auditorium SL, Bat.864 / 1D-002)

Contrôle par Réseau de Terrain WorldFIP OUTILS et SERVICES (Société HLP Technologies)

par Didier PERINO, Jérôme LUCAS et Bruno LEPVRAUD

Ordre du jour:

14h00: ACCUEIL

14h05: FORMATION WorldFIP au CERN en Octobre

14h10: PRESENTATION de la Société HLP Technologies, Chiffres clés

14h15: OUTILS LOGICIELS et MATERIELS

FIPWATCHER Analyseur de protocole, espion de bus

FIPDESIGNER

Outil de configuration du réseau, pour piloter facilement une station WorldFIP

FIPBUSVIEW

Pour programmer facilement sous LabVIEW (de National Instruments)

FIPNTools, Pour programmer sous NT

14h45: APPLICATIONS

VISION industrielle Transport d'images sous WorldFIP

FIPSensor, Boîtier d'entrées/sorties

15h00: ETUDES & DEVELOPPEMENT

Etudes & développements d'une application spécifique liée à WorldFIP

15h20: Discussion

15h30: Clôture et Pause Café

Nota:

- 1) Toutes les personnes intéressées par les réseaux de terrain "temps réel", les automates Schneider, Siemens et autres seront les bienvenues.
- 2) Cette réunion se fera en français mais les transparents présentées seront en anglais.
- 3) Pour plus d'information, consulter le site CERN WorldFIP rubrique "NEWS".
URL = <http://nicewww.cern.ch/sl/rfgroup/fip/Fipmenua.html> et
URL = http://nicewww.cern.ch/sl/rfgroup/fip/Suppliers/suppliers_new.htm où vous trouverez le site de HLP Technologies.
- 4) Trois autres réunions aurons lieu en Octobre et Novembre à savoir:
 - 12ème réunion : Réseau WorldFIP 25MHz déterministe (équivalent à un réseau 100MHz ETHERNET) et technologie FULLFIP3. Sociétés CEGELEC représenté par Mrs P. CHATELET et N. FAYARD (19 Octobre).
 - 13ème réunion: Mise en oeuvre des application WorldFIP et temps réel.: Sociétés SILICOMP représenté par Mrs P. CHATELET et N. FAYARD (23 Novembre).
 - 14ème réunion: Automates SCHNEIDER et Capteurs/ Actionneurs FIPIO (Date à définir).

De plus amples détails sur ces 3 réunions vous seront fournis prochainement.

Raymond BRUN SL/LRF (76946-Linkman WorldFIP CERN).

E-Mail : Raymond.Brun@cern.ch

Thursday 30 September

TECHNICAL PRESENTATION

09.00-16.00 hrs – bldg 40/R-D10

Power supplies and electronics loads

by C. VOGT / INNOTEC-Netzgeräte GbmH

INNOTEC-Netzgeräte will be presenting their full product range starting with the laboratory power supplies over the industrial power supplies and ending with DC-UPS.

Paralell to the product presentation there will also be a short presentation about the company.

Language: English, German

Information : S.SHEARER / SPL-PS / 76360

Thursday 30 September

TECHNICAL PRESENTATION

13.30 - 16.00 hrs – Bldg 104/R-B09

Vacuum Components specially designed for High Energy Physics

By Mr A. PFIFFNER /EVAC AG (CH)

Items on demonstration:

General Vacuum Components:

Flanges and Fittings made of Stainless Steel, Aluminium and Glass, available for ISO-KF, ISO-K and CF.

Special Vacuum Components:

With tapered flanges, EVAC-ISO and EVAC-CeFix.

Metal Seals:

Made of Al, Cu, Ni, etc..

Special Clamp Screws:

Specially designed to achieve higher seal forces needed for ISO-K metal seals (Stainless, Alu, antimagnetic).

Quick Release Chain Clamps:

Made of composite materials, Al, steel, stainless steel.

New items:

All Aluminium UHV Components:

Flanges, Fittings, Seals and Chain Clamps completely made of Aluminium (ISO-KF, ISO-K and CF) suitable for Cryogenic and High Energy Physics applications.

Metal Bellows and Hoses:

Available in an extended range of diameters (DN10 - 250) Length and Systems (ISO, CF, EVAC-CeFix etc.).

"easy CF"-Fast Conflat Connection:

Allows UHV-Connections in seconds.

Special Chain Clamp:

Manually operated (tool less) quick release chain clamp for fast and time saving couplings.

Language: French, English, German

Information: S.SHEARER /SPL-PS/76360