

SEMINARS

SEMINAIRES

Monday 27 March

DETECTOR SEMINAR

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

The Neutrino Oscillation Search Proposal – M.I.N.O.S.

by Daniel A. CRANE / Argonne National Laboratory

A summary of the proposal to search for $\nu_\mu \rightarrow \nu_\tau$ and/or $\nu_\mu \rightarrow \nu_e$ oscillations using a muon neutrino beam from Fermilab to Soudan, Minnesota. The beam designs, the design of reference near and far detectors, and several of the proposed oscillation tests are presented.

Monday 27 March

MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room

Ultra-violet renormalon revisited

by Arkady VAINSHTEIN / Theoretical physics
Institute, University of Minnesota & Budker Institut
of Nuclear Physics, Novosibirsk

The status of the so-called ultra-violet (UV) renormalon which contributes to large-order divergences of perturbative expansions in QED and QCD is considered. We argue that although the UV renormalon is associated with short-distance dynamics, the class of renormalon graphs is not well-defined and its overall weight is not controlled by theory. The technique based on operator product expansion is developed to evaluate the UV renormalon.

Monday 27 March

CERN PPE SEMINAR

at 16.30 hrs – Auditorium

Recent QCD Results from the D0 Experiment

by Jaehoon YU / University of Rochester

The D0 detector at the Fermilab pbar-p collider at $\sqrt{s}=1.8$ TeV has accumulated approximately 13.5pb^{-1} during the 1992-93 collider run and is accumulating more data in the current run. Thanks to near hermetic coverage, excellent energy resolution, and fine segmentation of the calorimeter, the D0 detector has been providing an excellent testing field of various perturbative QCD predictions. Color coherence in two jet final states, azimuthal angle correlations as a function of jet rapidity difference, the di-jet triple differential cross section, and an α_s determination from W+jet production will be discussed.

Tuesday 28 March

TECHNICAL PRESENTATION

at 09.30 hrs – CN Auditorium, bldg 31/3-005

Presentation of Hewlett-Packard's new J and K Series

by Ralf LEINEMANN / HP Boeblingen, Marketing Center

Hewlett-Packard is introducing new price/performance leaders in their market.

The K Series are well suited for general-purpose use in a technical environment, as NFS file servers or as compute servers.

The J Series represents an high-end addition to the popular Series 700 family of workstations with new multi-processors models.

Both the K and the J Series are based on a new generation of PA-RISC (PA-7200) processors allowing improved uniprocessor performance, symmetric multi- processing and upgradability to the 64-bits PA-8000 generation.

Organiser : S. Cannon / CN / 5036

Wednesday 29 March

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Self-interaction correction to black hole radiance

by Frank WILCZEK / Institute for Advanced Study,
Princeton, USA

We consider the modification of the formulas for black hole radiation, due to the self-gravitation of the radiation. This is done by truncating the coupled particle-hole system to a small set of modes, that are plausibly the most significant ones, and quantizing the reduced system. In this way we find that the particles no longer move along geodesics, nor is the action along the rays zero for a massless particle. The radiation is no longer thermal, but is corrected in a definite way that we calculate. Our methods can be extended in a straightforward manner to discuss correlations in the radiation, or between incoming particles and the radiation.

Thursday 30 March

REAL-TIME COMPUTER SHOW EUROPE AT CERN

09.00 to 16.00 hrs – Administration Building
bldg 60, 1st floor

Thirty-nine companies will present their real-time products at this exhibition at CERN. This event is organized by Active Exhibitions Europe.

The following companies announced their participation:

Acquisition Technology (NL)
Becom (D)
Cetia (F)
Centralp (F)
DDC-I (DK)
Digital Equipment (CH)
Digital Interactive Solutions (UK)
Ecrin (F)
EHS Electronic Systems (D)
Electronic Enclosure Solutions (UK)
Elma Electronic (CH)
ESD (D)
Floating Point Systems (UK)
Force Computers (D)
Gespac (CH)
GSI Tecsi (F)
Harris Computer Systems (D)
Hewlett Packard (UK)
HSP (F)
INCAA (NL)
Lecroy (CH)
Lynx Real-Time Systems (USA)
Metavision (F)
Micro Process Ingenierie (F)
Microware (F)
MSP Friedli (CH)

NAT (D)
 OmniRay (CH)
 Pentland Systems (UK)
 Philips (NL)
 Spectralab (CH)
 SKY Computers (UK)
 Struck (D)
 Themis Computer (F)
 Verilog (F)
 VI Computer (USA)
 Virtual Prototypes (CAN)
 Vsystems (F)
 Windriver Systems Wilk (UK)

Information : L. Pregernig / CN, E-mail or 2666

Friday 31 March

SL SEMINAR

at 11.00 hrs – SL Auditorium, Prévessin,
 bldg 864, 1st floor

Simultaneous, long- and short-lived neutral kaon beams for Experiment NA48

by Niels DOBLE / CERN-SL

A pair of simultaneous, nearly-collinear beams of long- and short-lived neutral kaons forms an integral part of the CP-violation experiment NA48. The design and results of the tuning of these beams are presented, with particular emphasis on a novel application of channeling in a bent crystal.

Wednesday 5 April

TECHNICAL PRESENTATION

at 10.00hrs – CN Auditorium, bldg 13/3-005

RRNE, Rolls-Royce Nuclear Engineering Limited : organisational structure, capabilities, experience, applications to CERN

by Leeann NEWMAN / RRNE

Products and services:

- High integrity welding and machining including remote technology
- manufacturing services in a range of materials to customer specifications
- site installation to meet the needs of a specific project
- inspection services including non-destructive exam and remote visual inspection
- comprehensive project management and customer support expertise

Language: English

Information: M. Diraison / FI-A / 4585

Wednesday 5 April

PS SEMINAR

at 11.00 hrs – PS Auditorium

Cooling, recombination and intra-beam scattering in one computer simulation

by C. TÖPFFER / Erlangen University, Germany

A possible scenario to produce low emittance lead beams for LHC consists of cooling the beams with electrons in LEAR. A number of phenomena like the stopping power of ions by electrons, the ionization and recombination by di-electronic

processes or the collisions between particles prevent the beam for attaining a very low temperature. They are investigated using the techniques of molecular dynamics and the results of computer simulations are presented.

Wednesday 5 April

CERN COMPUTING COLLOQUIUM

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

High level languages as programmer productivity tools

by Tom CHRISTIANSEN / PERL Consultant

Back in the dim days of punch cards and dip switches, a lone programmer would often spend months to produce reams of exceedingly efficient but nearly inscrutable code written in low-level assembly language. In the face of increasingly faster computer hardware, the optimal speed derived from unflinching diligence to the smallest detail is seldom so critical (or expensive!) as the programmer's own time. Today we have at our disposal innumerable high-level programming languages that radically improve programmer productivity at the cost of some machine time. Furthermore, because the number of bugs is roughly proportionate to lines of code, these high-level tools produce code that's more maintainable and less error-prone. Whether they're engaged in rapid prototyping or finishing up some connective software glue for a polished product, programmers using HLLs can easily boost their productivity ten or occasionally even one hundred times previous levels. These languages are freely available and easy to learn. In this talk, Tom Christiansen, frequent author and lecturer on Perl and UNIX shell programming, gives a guided tour through a variety of these tools pointing out relative strengths and weaknesses. Lecture topics will include broad-spectrum languages like Perl, Tcl, Python, as well as special purpose languages like Tk and Expect. A comparison to IBM's REXX language will also be done.

** Please note the unusual place*

Thursday 6 April

LABVIEW USERS MEETING

(CERN & SUISSE ROMANDE)

at 14.00 hrs – AT Auditorium, bldg 30, 7th floor

14.00 Some LabVIEW add-ons : SQL Toolkit, Process Control with PLC's, Picture Control Toolkit VXI Plug and Play (Andres Salvador, NatInst-USA)

15.00 Controlling Camac, VME and Fastbus systems with a PC, Macintosh or Sun (M. Demoulin, ECP-RA)

Coffee break (15 min)

15.45 News on LabVIEW 3.2 (Stephan Riha, LabVIEW Development Team)

17.00 Questions and answers

Information : F. Soso / CN / 2344

Friday 7 April

AT SEMINAR

at 14.30 hrs – AT Auditorium, bldg. 30, 7th floor

Recent progress in the development of numerical field computations

by Kurt. R. RICHTER / Institut für Grundlagen und Theorie der Elektrotechnik (IGTE) der Technischen Universität Graz, Austria

Advantages und disadvantages of various formulations for numerical field Computation will be reviewed and discussed. Emphasis will be put on the finite element method (FEM) as well as the boundary element method (BEM) basically the methods used by the IGTE-group at the Technical University in Graz. Applications and simulations of electrostatic, eddy-current and high frequency problems (microwave devices as wave guides, cavities, scattering problems) as well as the interaction between electromagnetic waves and human tissue will be demonstrated.

COGNE MEETING OF THE SPS AND
LEAR COMMITTEE

29 May – 3 June 1995

We would like to remind you that the deadline for submitting documents is **28 March 1995**.

SPSLC Secretariat / 4270 /
E-mail : SPSC@CERNVM.CERN.CH

EDUCATION SERVICES EDUCATIFS

ACADEMIC TRAINING

Tel. 3127

LECTURE SERIES

27, 28, 29 & 31 March

11.00 to 12.00 hrs - Auditorium

Black holes and Quantum Mechanics

by F. WILCZEK / Institute for Advance Study,
Princeton, USA

Lecture 1 : A qualitative introduction to black holes.

In this lecture, I will discuss some of the salient features of black hole physics from a very qualitative point of view, emphasizing pictures and very simple formulas all without derivations.

- 1) Qualitative introduction to black holes : classical.
- 2) Qualitative introduction to black holes : quantum.
(Hawking radiance)

Lecture 2 : Model black holes and model collapse process.

- 1) The Schwarzschild and Reissner-Nordstrom metrics;
- 2) The Oppenheimer-Volkov collapse scenario.

Lecture 3 : Mode mixing.

Lecture 4 : From mode mixing to Hawking radiance.

ENSEIGNEMENT GÉNÉRAL

Tél. 5811

Jeudi 30 mars

à 13.00 h – Amphithéâtre

Science pour tous

par Rafel CARRERAS



ENSEIGNEMENT TECHNIQUE TECHNICAL TRAINING

Monique Duval ☎ 44.60
eductech@cernvm

Informations sur les cours, dates et places disponibles sur serveur :
Information about the courses, dates and places available on server :

PE Division - SRV1_PE (Guest) - **COM - TRAINING -**

CoursET.fm (sans mot de passe - *no password*)

PERMANENCE BUREAUTIQUE

La prochaine permanence aura lieu le

3 avril 1995

Enseignement Technique

bât. 572 - salle 23

De 09 h.00 à 12 h.00, Valérie répondra aux questions que vous vous posez concernant l'utilisation des logiciels de bureautique (pas de rendez-vous préalable). Vous pouvez également poser vos questions par courrier électronique QuickMail à l'adresse suivante :

Valerie_Huret@adminmail1

Dès 14 h.00 – Atelier

WORD

Personnaliser son traitement de texte

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- paramétrage des Options
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