

SEMINARS

SEMINAIRES

Lundi 5 au vendredi 9 octobre

PRESENTATION TECHNIQUE AVEC DEMONSTRATION

de 08.30 à 12.00 h – bât. 513/R-052

Sun Microsystems (Suisse) SA propose de montrer l'intégration d'un émulateur Macintosh (Liken) et PC (SunPC) sur station de travail Sun. Ils tenteront de montrer qu'il est alors possible d'allier la puissance d'UNIX et l'utilisation des outils bureautiques les plus populaires du monde de la microinformatique (Finders/Windows, tableurs, traitements de texte, etc.).

Moyens à disposition pendant la semaine :

- une station de travail Sun SPARC 10 modèle 41
- un émulateur Mac (Liken de Xcelarated Systems Inc)
- un émulateur PC (SunPC de Sun)
- des logiciels de démos bureautiques (Windows, Finders, Excel, etc.)
- de la documentation

Tous les jours de 09.00 à 11.00 h, un ingénieur Sun apportera aide et explications aux personnes venant faire des essais. La machine sera alors à la disposition des personnes intéressées.

Prendre rendez-vous avec Sun:

tél. 022 364 47 35, fax 022 364 11 76

Renseignements : M. Diraison / FI / 4585

Monday 5 October

PPE SEMINAR

at 16.30 hrs – Auditorium

Study of the $J_{pc}=1^{++}$ mode in the partial-wave analysis of $\eta' - \pi$, $\eta - \pi$, $f_1 - \pi$ and $\rho - \pi$ systems produced in $\pi - N$ interactions at $P_\pi = 37$ GeV/c

by A. ZAITSEV / IHEP, Serpukhov (VES Collaboration)

Wednesday 7 October

PS SEMINAR

at 11.00 hrs – PS Auditorium
bldg 6/2-024

Beam dynamics considerations in the design of the LHC

by Jacques GAREYTE / CERN-SL

The LHC has been designed to reach the highest possible luminosity. The basic constraint comes from the beam-beam limit, which is inferred from experience with the Sp $\bar{p}$ S and the Tevatron. Other important considerations are linked to the total circulating current, like the radiated power, the energy stored in the beam, and the resistive wall instability, while the concept of Dynamic Aperture links the design of the magnet

to the maximum beam emittance. Other classical beam effects like Intra Beam Scattering and single bunch instabilities can be mastered and should not affect performance.

Wednesday 7 October

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

High temperature phase transition in theories with scalars

by Christof WETTERICH / Heidelberg University

High temperature perturbation theory fails near the phase transition due to infra-red divergences. We propose a new method which deals properly with the infra-red behaviour of massless three-dimensional theories. We give the temperature-dependent effective potential for the N-component ϕ^4 theory. The phase transition is second order and characterized by the critical indices of the three-dimensional theory. In particular, the ϕ^4 coupling vanishes at the critical temperature. We comment briefly on consequences for the electroweak phase transition and a possible creation of baryon asymmetry during this transition.

Friday 9 October

MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room

Toponium at LHC and at e^+e^- machines

by J.H. KUEHN / Universität Karlsruhe

The production rate for η_c at LHC and its branching ratio into two photons will be presented, including QCD corrections for production and decay and the effect of the two-loop QCD potential. Predictions for the cross-section and the momentum distribution of top quarks and its decay products at an electron-positron collider will be derived.

Monday 12 October

TECHNICAL PRESENTATION

10.00–12.00 & 14.00–16.00 hrs

PS Auditorium – bldg 6/2-024

Struck, Electronics for High Energy and Industry (D), will present their latest developments :

- 200MHz Flash ADC-System DL515
- 40MHz low cost Flash ADC-System STR750
- Differential VSB Extension to Fastbus and CAMAC
- Enhanced version of CHI
- Quadruple DSP Module (MC96002) STR370
- Surface Inspection System AOD

Information : M. Diraison / FI / 4585

Monday 12 October

PRESENTATION

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

LynxOS Developments

by Bill GALLMEISTER / Lynx Real-Time Systems
Inc., Los Gatos, California

LynxOS, a real time POSIX compatible operating system which runs on a variety of hardware platforms, has been used in CERN's accelerator control systems for about a year. The speaker will describe recent developments in LynxOS and related software from Lynx.

Bill O. Gallmeister is a software engineer at Lynx-Real Time Systems and vice-chairman of the IEEE POSIX 1003.4 working group (Realtime Extension for Portable Operating Systems).

Information : Julian Blake/CN-CE/4893/
blake@dxcern

Motivated by nearly unanimous claims that the observed mass spectrum $\eta' \rightarrow \pi^+ \pi^- \gamma$ is not ρ^0 dominance, we reanalyze all the published data on $\eta \eta' \rightarrow \pi^+ \pi^- \gamma$ decays. We find non-resonant contributions. In order to quantify precisely the magnitude of these terms, we also refit the $e^+ e^- \rightarrow \pi^+ \pi^-$ data to get reliably the ρ^0 parameters and decay amplitude. We show that identifying the non—resonant contribution with the box anomaly predicted by QCD and chiral theories, one achieves a consistent picture. Several checks are performed which show the consistency of our fitted parameters. From four measurements, we determine f_1 , f_8 and θ_{ps} on purely experimental grounds, and we find them in the expected range. Presently available data allow for two solutions, one is consistent with QCD, the other favours integral charge quark models. We show that presently available data do not allow to discriminate among these two solutions. We discuss the interrelation of uncertainties in $e^+ e^- \rightarrow \pi^+ \pi^-$ physics with our two solutions.

Monday 12 October

PPE SEMINAR

at 16.30 hrs – Auditorium

**Experimental evidences for the box anomaly
in η/η' decays and the electric charge of quarks**

by M. BENAYOUN / Laboratoire de Physique
Corpusculaire, Collège de France

EDUCATION SERVICES EDUCATIFS

MANAGEMENT & COMMUNICATION

SEMINAIRES PREVUS EN OCTOBRE - SEMINARS FORESEEN IN OCTOBER

Madeleine Pincott  3674 am - pincottm@CERNVM

Dates	Séminaires/Seminars	Lang.	Durée Duration	Disponibilité Availability
13, 14 & 26, 27 oct.	Communiquer efficacement	F	4 jours	1 place
28, 29 oct	S'exprimer efficacement en situations de travail	F	2 jours	complet
28, 29 Oct. & 11, 12 Nov.	Communicating effectively	E	4 days	6 places
Si vous désirez vous inscrire pour un de ces séminaires prenez contact avec votre responsable hiérarchique et votre DTO.		If you would like to enrol in one of these seminars, please contact your supervisor and your DTO.		