

SEMINARS

SEMINAIRES

Monday 30 January

TECHNICAL PRESENTATION

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

An MPP with the manners of an HP workstation

by Greg ASTFALK / Staff Scientist Convex Computer Corporation

Convex Computer Corp has developed a Scalable Parallel Processor based on the Hewlett-Packard RISC chip. The machine is named the Exemplar and can grow from 2 to 128 processors configured with 128 Mbytes to 32 Gbytes of memory. The I/O system can support over 1 Tbyte of disk.

The Exemplar supports Application Binary Interface (ABI) compatibility with HP/UX. Executables and object modules can be shared by the Exemplar and H-P workstations, and the operating system is compatible at the system call level. Among its many advanced features are: 8-way multi-processor nodes, fully cache coherent Globally Shared Memory (GSM), auto-parallelizing Fortran and C compilers, and a parallel debugger and profiler that are hardware aware. The talk will cover the architecture, software and hardware of the machine.

Organiser : S. Cannon / CN / 5036

Mardi 31 janvier

PRESENTATION TECHNIQUE

09h00-12h00 & 14h00-16h30 – bât. 54/2-035

Protection d'appareils à pression, normalisation

Séminaire par Groupe SEBIM : RSBD, SARASIN (F)

09h00-10h00 présentation du groupe SEBIM (RSBD, SARASIN), rappels de base sur les protections d'appareils à pression, normalisation.

10h00-11h00 disques de rupture, application en cryogénie.

11h00-12h00 soupapes à ressort, application en cryogénie.

14h00 - 15h00 soupapes pilotées, développement.

15h00 - 15h30 présentation de la Commission TIS et l'utilité d'une telle structure sur le site du CERN par E. Jonker / TIS / 2368-4860 (1222), C. Margaroli / TIS / 3582-4860 (3670)

15h30 débat sur questions diverses à soumettre auparavant si possible.

Langue : français.

Renseignements : M. Diraison / FI-A / 4585

Mardi 31 janvier

PRESENTATION TECHNIQUE

à 10.00 h – Amphithéâtre CN, bât. 31/3-005

Présentation de la ligne de produits HMX

par M. GUILLOUX / NCD France

- Présentation d'NCD (historique et lignes de produit)
- Présentation de la ligne de produits HMX (nouvelle génération de terminaux X-window, équipée de processeurs 64 bits, résolution maximale 1600X1200, interfaces série, parallèle, PCMCIA)
- Présentation de PCXWare et Z-Mail.
- Questions/réponses

Organisateur: S. Cannon / CN / 5036

Wednesday 1 February

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Non-perturbative symmetries in superstring theory

by M.B. GREEN / DAMTP, Cambridge & CERN

There are various reasons for suspecting that perturbative string theory is the background-dependent manifestation of an underlying theory of quantum gravity that incorporates large discrete gauge symmetries. This talk will give a (not too technical) review of some new evidence for this that arises from consideration of chiral anomalies in superstring theory.

Thursday 2 & Friday 3 February

FIRST GENERAL MEETING OF THE LEP2 WORKSHOP

at 09.00 hrs – Main Auditorium (bldg. 500)

The different Working Groups will present a status report and a programme of their forthcoming activities.

Thursday 2 February

09h00-09h15	Introduction
09h20-10h00	Status of LEP2 (C. Wyss)
10h10-11h00	WW
11h00-11h30	Break
11h30-12h20	WW (Event generators)
12h30-13h00	Z-prime
13h00-14h00	Lunch
14h00-14h50	WWV
15h00-15h50	W mass
15h50-16h20	Break
16h20-17h10	Standard processes
17h20-17h50	Bhabha scattering (Event generators)

Friday 3 February

09h00-10h00	Physics/machine interface
10h00-10h30	Break
10h30-11h05	QCD
11h15-11h50	QCD (Event generators)
12h00-12h35	Gamma-gamma
12h35-13h45	Lunch
13h45-14h20	Gamma-gamma (Event generators)
14h30-15h20	Higgs
15h30-16h20	New particles
16h20-16h50	Break
16h50-17h40	Discovery physics (Event generators)
17h50-18h00	Conclusions

Monday 6 February

PPE SEMINAR

at 16.30 hrs – Auditorium

Observations of π -B charge-flavor correlations and resonant $B\pi$ and BK production

by Bob KOWALEWSKI / CERN-PPE

Evidence will be presented for kinematic and charge correlations of B mesons with charged pions and kaons. Using a new technique, a sample of over 80,000 partially reconstructed B mesons is obtained in 3.5×10^6 hadronic Z^0 decays recorded using the OPAL detector at LEP. The invariant mass distributions of $B^+\pi^-$ and B^+K^- combinations show enhancements consistent with the decays of P-wave resonances of a b antiquark and a light quark. We observe an excess of $1,738 \pm 195 B^+\pi^-$ pairs with invariant masses in the range 5.60-5.85 GeV and an excess of $149 \pm 31 B^+K^-$ pairs with invariant masses in the range 5.80-6.00 GeV. From a study of π -B charge-flavor correlations we conclude that the production flavor of a B meson can be tagged with the charge of a pion in an appropriately chosen kinematic region, and that the performance of this flavor tag compares favorably in Z^0 decays with lepton-based tags.

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LECTURE SERIES

6, 7, 8, 9 & 10 February

11.00 to 12.00 hrs – Auditorium

History of the XXth Century Physics

by S. KAPITZA / Academy of Sciences, Moscow, Russia

The meaning and message of the history of science will be discussed with relevance to XX century physics. This decisive period began in 1894-95 with the discoveries of the electron, X-rays and radioactivity, with the consequent development of relativity and quantum physics. Connections of the development of science and society in XX century with culture and the influence on industry will be examined. Finally, the corruption of physics by the military will be considered. The influence of physics on chemistry and biology will be briefly treated and the impact of the approach and method of physics on modern thinking will be assessed. It should be kept in mind that the history of science is not a way of getting a simplified or adulterated presentation of the subject, in this case of physics and so some understanding of general physics will be assumed. On the other hand, the broader generalisations of the history of ideas and events are to be illustrated (if not proven) by the facts (and myths) of science. Finally, as an exercise in a study of science and society, history of physics may lead to a better understanding of the present predicament of humankind, that is certainly now facing a decisive period of its development. That is why the whole subject as a chapter of history may be of some immediate, if not practical interest today.

Tuesday 7 February*

COMPUTING SEMINAR

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

Entering Spaceland

by Jean-Francis BALAGUER & Enrico GOBBETTI / CRS4, Italy

Organiser : D. Kemp / CN

* Please note unusual day

Thursday 9 February

CERN COLLOQUIUM

at 16.30 hrs – Auditorium

Hubble Space Telescope Images : from collisions with Jupiter to ancient clusters of galaxies

by A. KINNEY / Space Telescope Science Institute, Baltimore

ENSEIGNEMENT GÉNÉRAL

Tél. 5811

Jeudi 2 février

à 13.00 h – Amphithéâtre

Science pour tous

par Rafel CARRERAS