

SEMINARS SEMINAIRES

Monday 20 February

CERN COLLOQUIUM

at 14.00 hrs – Auditorium

**Special Symposium in honour of
Leon Van Hove for his 65th birthday**

- C. Rubbia* Opening address
W. Kittel The interplay between experimental and
theoretical physics
V. Soergel International collaboration in physics

Monday 20 February

TECHNICAL CONSULTATION

14.00 to 17.00 hrs – DD Division Conference
Room no. 1 (bldg 600/R-017)

Creative Electronic Systems (CES) of Petit-Lancy, Geneva, will be available for informal discussion and technical consultation on all aspects of their products (VMEbus, Camac and Fastbus).

Language : English

Information : C. Parkman / DD / 3963
PMN@CERNVM

Monday 20 February

CAS ACCELERATOR SEMINAR

at 14.30 hrs – Council Chamber

**Electron spin polarization in storage rings :
the SMILE algorithm**

by S.R. MANE / Fermilab

The SMILE program contains a general algorithm, usually called the 'SMILE algorithm', to calculate the polarization in high energy storage rings, in the approximation of treating only linear orbital dynamics. Arbitrary machine lattices can be treated, provision is made to include machine imperfections, and the widths of arbitrary depolarizing spin resonances are calculated. The seminar will describe this algorithm, including its limitations and problems when applying it to very high energy machines such as LEP. Brief comparisons (proofs of equivalence) with other formalisms will also be discussed, as well as prospects for future work.

Wednesday 22 February

PS SEMINAR

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

RFQ traps as beam coolers and bunchers

by R.B. MOORE / Department of Nuclear
Physics, McGill University, Montreal

Radio-frequency quadrupole (RFQ) ion traps have been built and studied in many laboratories since their invention in the early 1950s by Paul. However, they have been of limited use. This is primarily because, since the trap forms an enclosure with walls in any direction of motion, the ions held by such traps have had to be created within the trap itself. Recently a mechanism has been developed for injecting ions into an RFQ trap from the outside world. The methods are analogous for those used for injection into storage rings. This is not surprising since the RFQ trap and the alternating gradient storage ring have mathematically identical descriptions. The extraction of ions from an RFQ trap is very easy and the ions appear from the trap in usually a time spread of several tens of nanoseconds. Because there are simple and very effective means to cool ions in an RFQ trap, enormous compressions of the Liouville phase space of a beam are possible. This has important implications for the acceleration of radioactive beams such as is being considered at ISOLDE for astrophysics research. The principle of RFQ traps and the injection scheme will be presented as will some of the design parameters for a useful trap for radioactive beams.

Wednesday 22 February

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

**Effective Lagrangians for superstring
compactifications**

by S. FERRARA / CERN

We discuss some general features of the low-energy limit of superstrings compactified on manifolds which preserve one or more space-time supersymmetries in four dimensions. The relation between compactification of heterotic and type II superstrings is discussed and its implication for the moduli space of Calabi-Yau manifolds outlined.

Wednesday 22 February

DD SEMINAR

at 16.00 hrs – DD Auditorium
bldg 31, 3-005

The ACE multiprocessor workstation

by Colin G. HARRISON / IBM Yorktown

ACE is an experimental multiprocessor workstation developed at IBM's T.J. Watson Research Center, New York. It provides up to 8 processors of the type employed in the IBM Model 6150 workstation, together with at least 16 MB of shared-memory. I/O services are provided by a host 6150. Both the host and the multiprocessor run the Mach version of 4.3 BSD Unix. ACE was developed to explore issues of hierarchical memory in scalable multiprocessors and to provide a hardware platform on which to explore software issues in the application of this emerging

class of systems. This talk will describe the ACE project, the ACE system and goals for providing MP programming and execution support in a workstation.

Jeudi 23 février

PRESENTATION

à 09.00 h – Atelier Principal
bât. 100

UTP Matériaux de soudure et de protection SA

Démonstration coupage au plasma (air comprimé), différents postes de soudure (électrode-combiné MIG / MAG et TIG), soudure semi-automatique.

Protection : équipement et habits de protection pour chaque corps de métier.

Thursday 23 & Friday 24 February

INTERNATIONAL SGML USERS' GROUP MEETING

at 9.30 hrs – Council Chamber

SGML (ISO 8879) – a standard for exchanging text – is of interest to CERN. The SGML users group has been active for several years and CERN is pleased to be able to be the host for this meeting.

Thursday 23 February

Meeting of the database special interest group

Friday 24 February

- *Introduction*
Eric van Herwijnen / CERN

- *An SGML based publishing system at the ISO central secretariat*
Anders Berglund / ISO
- *An SGML implementation on TeX, including mathematics*
Alexandre Samarin / Serpukhov (awaiting confirmation)
- *Conversion from existing formatted text to SGML*
Jurgen De Jonghe / CERN
- *Using Mathtype and Mathematica as input system for SGML*
Anna Ballanti / CERN

Lunch

- *The European Physical Society project for electronic article submission*
Hans Sens / CERN
- *SGML at Elsevier*
Jan Bleeker / Elsevier
- *GRIF : an interactive editor for structured documents*
I. Vatton & V. Quint / University of Grenoble
- *European Test Laboratory for SGML parsers*
Sheila Lewis / NCC

Information : Jurgen De Jonghe / DD / 5087 /
JURGEN@CERNVM

Wednesday 1 March

CAS ACCELERATOR SEMINAR

at 14.30 hrs – Auditorium

Observation of beamstrahlung at the SLC
by G. BONVICINI / SLAC

TRAINING AND EDUCATION ENSEIGNEMENT

ENSEIGNEMENT GENERAL Tél. 2844-5811

Jeudi 23 février

de 13.00 h à 13.30 h – Auditorium
Science pour tous
par R. CARRERAS

ACADEMIC TRAINING

Tel. 2844-3364

22, 23 & 24 February

11.00 to 12.00 hrs – Auditorium

Space technology

by W. KRÖLL / DFVLR, Köln

24 February

11.00 to 12.00 hrs – DD Auditorium*
bldg 31, 3rd floor

Image processing

Lecture 1

by M. KUNT / EPF, Lausanne

Lecture 2 : Friday 3 March

* Please note unusual place!