

EDUCATION SERVICES EDUCATIFS

1993 – 1994 ACADEMIC TRAINING PROGRAMME

2nd Term

5 January – 31 March 1994

LECTURE SERIES FOR POSTGRADUATE STUDENTS

10, 12, 14, 17 & 19 January

11.00 to 12.00 hrs – Auditorium

**Introduction to supersymmetry
for particle physics**

by S. FERRARA / CERN-TH

24, 26, 28 January

11.00 to 12.00 hrs – Auditorium

CP violation in the Standard Model

by B. GAVELA / CERN-TH

Dates to be fixed

11.00 to 12.00 hrs – Auditorium

An introduction to accelerators

by E.J.N. WILSON / CERN-SL

LECTURE SERIES FOR ACADEMIC TRAINING

31 January & 1, 2, 3 February

11.00 to 12.00 hrs – Auditorium

Introduction to neural networks

by F. JAMES / CERN-CN

21, 22, 23, 24 & 25 February

11.00 to 12.00 hrs – Auditorium

The next generation of linear colliders

by R.B. PALMER / SLAC, USA

7, 8, 9, 10 & 11 February

11.00 to 12.00 hrs – Auditorium

Weather forecast

by P. COURTIER / ECMWF, Reading, UK

14, 15, 16, 17 & 18 March

11.00 to 12.00 hrs – Auditorium

New detector techniques

by E. IAROCCI / Laboratori di Frascati, Italy

14, 15, 16 & 17 February

11.00 to 12.00 hrs – Auditorium

Particle astrophysics

by M. SPIRO / CERN-PPE

21, 22, 23, 24 & 25 March

11.00 to 12.00 hrs – Auditorium

Cosmology and the origin of structure

by R. BRANDENBERGER / Brown University,
Providence, USA

The lectures in both series are open to all those interested, without application.

The abstract of the lectures, as well as any change to the above information (dates, title, time, place, etc.) will be published in the CERN Bulletin and by Notices before each Term and for each series of lectures.

LECTURE SERIES

10, 12, 14, 17 & 19 January

11.00 to 12.00 hrs – Auditorium

**Introduction to Supersymmetry
for Particle Physics**

by S. FERRARA / CERN-TH

The Programme of these introductory lectures to supersymmetry will include the following topics :

1. *An introduction to space-time symmetries : Poincaré and conformal invariance*
2. *What is supersymmetry? Fermi-Bose symmetries, multiplets and currents.*
3. *Construction of supersymmetric interactions : Yukawa couplings and Yang-Mills theories.*
4. *Spontaneous and explicit supersymmetry breaking.*
5. *Softening of quantum divergences : the hierarchy problem, the supersymmetric standard model.*

ENSEIGNEMENT GÉNÉRAL

Tél. 5811

Jeudi 13 janvier

à 13.00 h – Amphithéâtre

Science pour tous

par Rafel CARRERAS

Reprise des séances.



Technical Seminar

There are still some places available for the following seminar

Tools for System Management

**24-27 January 1994
from 9:00 to 12:00**

**by L. Cons & P. Defert
CERN/CN**

Purpose:

The course is intended for anyone with tasks oriented towards system or computer management with experience in programming (C, Shell or Lisp) who would like to acquire knowledge in some high level languages tailored to ease the manipulation of text and files, the system operations, the monitoring of processes and perhaps user interface.

Outline:

The course is twofold.

1. An overview of the PERL language developed by L. Wall that is a de facto standard for system managers: PERL is an interpreted language optimized for scanning arbitrary text files, extracting information from those text files, and printing reports based on that information. It's also a good language for many system management tasks. It combines some of the best features of C, sed, awk, and sh, so people familiar with those languages should have little difficulty with it.
2. An overview of the tool command language (TCL) facilities and the tk X-window toolkit developed by J. Ousterhout: TCL offers the same kind of functionality than PERL with a more limited domain of system applications. Access to the tk toolkit is granted by the windowing shell (wish) that is a superset of TCL with an easy-to-use Motif like user interface.

Registration:

Those who would like to apply should fill in an "Application for Training" form which may be obtained from the Divisional Secretariat, the Divisional Training Officer or the Technical Training Secretariat. A financial contribution of CHF 400 per person will be charged to the division. The number of participants is limited to 12. Extra sessions may be organised if necessary.