

Wednesday 10 May

COMPUTER SEMINAR

at 16.00 hrs - Auditorium*

Multi-media networking

by Chris ADAMS / Rutherford Appleton
Laboratory, UK

TRAINING AND EDUCATION ENSEIGNEMENT

INFORMATICS TUTORIALS 1989

Announcement

Title : An Introduction to Operating Systems
Lecturer : C.R. SNOW / University of Newcastle-upon-Tyne
Dates : Monday 9 to Friday 13 May
Place : Mornings - DD Auditorium (bldg 31, 3rd floor)
Afternoons - Technical Training facility (bldg 593)

The course discusses the principles of operating system design, taking a detailed look at the overall structure of an operating system, and the design and implementation of its various components. As each aspect is considered, various alternative design decisions will be described and evaluated. The course will be divided into five parts, each one corresponding (roughly) to one of the five days during which the course will run. The aspects to be considered will be :

- *Introduction to operating systems, processes and interprocess communication, system structure, process representation, process scheduling*
- *User view of an operating system, user interaction with the system, system calls*
- *Memory management, allocation of real memory, virtual memory and its management*
- *Input/output, device drivers, deadlocks*
- *File systems : design and implementation*

The course will be based on Andrew S. Tanenbaum's book 'Operating Systems : Design and Implementation', and practical work will be undertaken using the MINIX system as described in this book.

Practical exercise sessions are foreseen in the afternoons on the IBM PC/ATs of the Technical Training facility. Since the MINIX system is written in the C language, a good working knowledge of that language is desirable to gain a maximal benefit from the course. In fact, modification of the MINIX system constitutes the main part of the practical work.

Registration :

If you wish to attend this series you should discuss the matter with your direct supervisor and, if he agrees, send an electronic mail message to INFOTUTO@CERNVM, indicating your preferred electronic mail address.

C.R. Snow is a lecturer in Computing Science at the University of Newcastle-upon-Tyne (England), with a general interest in low-level software and operating systems. Recently he has been interested in the problems of debugging systems programs, and particularly in techniques for locating concurrency related bugs. He has been teaching a practical course in operating systems to final year undergraduates for a number of years.

ACADEMIC TRAINING

Tel. 2844-3364

9, 10 & 11 May

11.00 to 12.00 hrs - Auditorium

Materials for advanced technologies

by M. VAN DE VOORDE / Joint Research Centre, Petten

Structural materials are the building blocks in the successful developments of advanced technologies and industrial innovation. It will be demonstrated that materials presently operate at the limit of their capability. The importance of modern materials will be illustrated by examples taken from aerospace and aeronautics, the chemical industry, energy conversion and utilization, the automobile industry, nuclear technology. An overview of materials research in the industrial nations in the World will be given with emphasis on the efforts in Western Europe. Polymeric materials, metals and alloys, engineering ceramics, protective coatings and new composite materials will be reviewed. The course will focus on modern materials and new materials technologies. Although information will be given on materials processing research, the lectures will concentrate on the behaviour of materials in service and study the mechanical, physical and corrosion property degradation and failure mechanisms, in view of the determination of the reliability and life-time prediction of engineering components. New developments in technologies e.g. joining, non-destructive testing, etc., will be reviewed. The lecture series will conclude with directions for future materials R&D and give prospects for new materials in the next decade.

Mardi 2 mai

LES SCIENCES AUJOURD'HUI

à 20.00 h précises – Amphithéâtre
(jusqu'à environ 22.00 h)

par R. CARRERAS

Rafel Carreras, responsable du programme d'Enseignement général au CERN, commentera et expliquera un choix d'articles parus récemment dans des revues scientifiques, et qui couvrent l'ensemble des sciences physiques et biologiques ainsi que certains aspects des relations science-société. Une attention particulière est portée au langage et aux notions utilisés afin que les explications et les commentaires soient accessibles aux personnes n'ayant pas de formation scientifique.

Entrée libre

(Please note that the lecture will be given in FRENCH)

Service des Relations Publiques
Tél. 2722

INFORMATIONS GENERALES GENERAL INFORMATION

LIGNE A HAUTE-TENSION DU BOIS DE SERVES

Certains membres du Personnel du CERN et un grand nombre de nos visiteurs du samedi se demandent si la ligne à haute-tension qui est en cours d'installation dans la région, et qui coupe si visiblement le Bois de Serves entre les sites de Meyrin et de Prévessin, est rendue nécessaire par le CERN et la prochaine mise en service de son LEP.

La réponse à cette question est parfaitement claire : cette installation ne répond à aucune demande du CERN en courant électrique, présente ou imminente : la ligne tirée dans les années 1970 pour le CERN suffit amplement à tous ses besoins actuels et futurs. La ligne actuellement en construction répond aux besoins d'échanges d'électricité entre la Suisse et la France, et s'inscrit dans le contexte d'un réseau européen.

Chef de l'Administration

REINTEGRATION IN DAS ÖSTERREICHISCHE SOZIALVERSICHERUNGSSYSTEM

Im Hinblick auf das bevorstehende Zusatzabkommen zwischen dem CERN und Österreich findet ein Informationstreffen für alle beim CERN beschäftigten Österreicher statt :

Freitag, 21. April 1989, um 14 Uhr 30
Council Chamber

ENSEIGNEMENT GENERAL Tél. 2844-5811

PICKED UP FOR YOU THIS WEEK Brochure (R. CARRERAS)

The 1988 Brochure will be published in April 1989

When ready, it may be obtained on **self-service only** :

- in the corridor, about 30 metres left of the Main Library door (between bldgs 2 & 510, 1st floor).
- in the corridor, outside the Printing Office (between bldgs 2 & 510, ground-floor)

All the previous years' brochures are OUT OF PRINT

Requests from outside CERN should be addressed to the

Scientific Information Service (SIS), CERN.

BOIS DE SERVES HIGH-TENSION LINE

Some members of CERN staff and many of our Saturday visitors wonder whether the new high-tension line which cuts so blatantly through the Bois de Serves between the Meyrin and Prévessin sites is a consequence of the needs of CERN and the forthcoming start-up of LEP.

The answer to this question is simple and straightforward : the new installation does not stem in any way from CERN's present or future electricity requirements, which are more than satisfied by the supply constructed for it in 1970. The new line is intended to meet the requirements for electricity exchanges between Switzerland and France and is part of a European network.

Head of Administration

Herr E. Boba, der zuständige Abteilungsleiter der Österreichischen Pensionsversicherungsanstalt, wird zur Beantwortung von Fragen anwesend sein, ebenso ein Vertreter des CERN Pensionsfonds.

Wir erinnern alle österreichischen Kollegen an diese einmalige Gelegenheit.

H. Koziol / PS-Division