

Wednesday 10 January

COMPUTER SEMINAR

at 16.00 hrs – Auditorium*

Mach : technical innovations & key ideas

by Daniel P. JULIN / Carnegie Mellon University

'Mach' is a multiprocessor operating system kernel under development at CMU. The targeted computing environment spans a wide class of systems, providing basic support for large, general purpose multiprocessors, smaller multiprocessor networks, individual workstations and personal computers. Mach has already been ported to the VAX family of computers, the IBM 370, IBM RT-PC, SUN 3 and 4 (SPARC), MIPS, Intel 386, Mac II, the Encore Multimax, the Sequent Balance, the BBN Butterfly Plus and a number of experimental computers, notably the IBM RP3 and the IBM ACE multiprocessor workstation. In addition to binary compatibility with Berkeley's current UNIX 4.3 BSD release, Mach provides a number of new facilities not available there, including support for tightly and loosely coupled multiprocessors, flexible memory sharing, lightweight processes (threads), a capability-based IPC facility and file mapping. The basic Mach abstractions are intended not simply as extensions to the normal UNIX facilities but as a foundation upon which new UNIX facilities and UNIX-like systems can be built. This talk will provide a brief overview of Mach and describe the key ideas and technical innovations that have gone

into its development. Mach's current status and its future directions will also be discussed.

Daniel Julin's Electrical Engineering degree is from the Brussels Free University, and his MSc and (future) PhD are from Carnegie Mellon. He has been a member of the Mach project at CMU since 1984. His interests within that project include networking, object-oriented program development, security and operating system emulation.

* Tea & coffee will be served at 15.30 hrs.

Tuesday 16 January

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium

Search for new particles in ALEPH

by Sau Lan WU / University of Wisconsin-Madison

Wednesday 17 January

DD SEMINAR

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

The K2 Project

by Marco ANNARATONE / ETH Zurich

TRAINING AND EDUCATION ENSEIGNEMENT

ENSEIGNEMENT GENERAL Tél. 2844-5811

Jeudi 11 janvier

de 13.00 h à 13.30 h – Amphithéâtre

Science pour tous

par R. CARRERAS

ACADEMIC TRAINING

Tél. 2844-3674-3364

15, 16, 17, 18 January

11.00 to 12.00 hrs – Auditorium

New physics at LEP and future machines

by R. BARBIERI / University of Pisa

I discuss the main predictions yet to be tested of the standard model :

- i) the existence of the top quark*
- ii) the existence of the Higgs boson*
- iii) a strict Cabibbo-Kobayashi-Maskawa picture of flavour physics*

I survey the general problems encountered where one looks beyond the standard model physics.

I describe the experimental signatures of the possible extensions of the standard model, with special emphasis on supersymmetry.