

data in these environments. Although the power of individual workstations and large compute servers has improved constantly, centralized file servers have been expensive and slow.

To allow solving the mass storage crisis most of the "enabling technologies" arrived in 1990:

1. RAID (inexpensive disk array) subsystems with a variety of characteristics.
2. HIPPI (High Performance Parallel Interface) as a high-performance channel.
3. High Performance Optical Networks based on standard HIPPI interfaces.
4. Standard Hierarchical File Management Software (i.e. UNITREE).

The remaining "enabling technology" needed is a set of standard, high-performance communications protocols.

Resulting file servers are now being offered or talked about by almost every computer vendor. The major directions of the industry will be examined, including those of Aptec whose solution is not based upon a general purpose computer.

Organizer : Sverre Jarpe / CN / sverre@cernvm.cern.ch

Tuesday 30 July

CN SPECIAL SEMINAR

New Solutions for Computer Controlled Systems using Industry Standards

at 14.00 hrs – CN Auditorium

bldg 31/3-005

by Adria PARR & Jerry STOOKBURY / Hewlett Packard, Colorado

Hewlett Packard's commitment to innovation based on standards and cost effective products is providing new solutions for computer controlled systems.

We shall present a new generation of 9000/300 Series computers based on the Motorola 68040 which are also available for the new VXI instrument card cage. Object oriented extension to HP's Basic (RMB+) and a new version of ITG (Instrument Test Generator) for DOS with instrument driver writing tool will also be described.

The discussions will be followed by a demonstration of a new concept of "Executable Block Diagram" Software.

Jerry STOOKBURY is a Product Engineer from HP's Measurement System Operation and has experience in Unix and object oriented programming. Adria PARR is a VXI Application Specialist Engineer.

Organizer : Chris Parkman / CN / pmn@cernvm.cern.ch

TRAINING AND EDUCATION ENSEIGNEMENT

SUMMER STUDENT LECTURES

This week

Mon. 22 July	09.00	R. Kleiss	The Standard Model (3)
	10.15	J. Haïssinski	Physics with LEP (1)
	11.15	E. Wilson	An intro. to accelerators – past, present and future (1)
Tue. 23 July	09.00	R. Kleiss	The Standard Model (4)
	10.15	J. Haïssinski	Physics with LEP (2)
	11.15	E. Wilson	An intro. to accelerators – past, present and future (2)
Wed. 24 July	09.00	R. Kleiss	The Standard Model (5)
	10.15	J. Haïssinski	Physics with LEP (3)
	11.15	E. Wilson	An intro. to accelerators – past, present and future (3)

<i>Thu. 25 July</i>	09.00	R. Kleiss	The Standard Model (6)
	10.15	J. Haissinski	Physics with LEP (4)
	11.15	E. Wilson	An intro. to accelerators – past, present and future (4)
<i>Fri. 26 July</i>	09.00	J. Haissinski	Physics with LEP (5)
	10.15	J. Haissinski	Physics with LEP (6)
	11.15	E. Wilson	An intro. to accelerators – past, present and future (5)
Next week			
<i>Mon. 29 July*</i>	09.00	E. Wilson	An intro. to accelerators – past, present and future (6)
	10.15	E. Picasso	The design, construction and operation of LEP (1)
	11.15	E. Picasso	The design, construction and operation of LEP (2)
<i>Tue. 30 July*</i>	09.00	H. Hilke	Particle detectors (1)
	10.15	H. Hilke	Particle detectors (2)
	11.15	---	---
<i>Wed. 31 July*</i>	09.00	H. Hilke	Particle detectors (3)
	10.15	H. Hilke	Particle detectors (4)
	11.15	---	---
<i>Thu. 1 August</i>	09.00	---	---
	10.15	---	---
	11.15	---	---
<i>Fri. 2 August</i>	09.00	P. Gavillet	Particle detectors (5)
	10.15	---	---
	11.15	---	---

* Venue for lecture : Council Chamber

While these lectures are prepared for Summer Students who are at CERN this summer, they are open to anyone at CERN. Many of these lectures treat topics at general level, such that they are a golden opportunity for a staff member to find out more about something outside his/her daily work. Whether you are new at CERN, or have been here a long time and wish to have a better understanding of what goes on, why not study the lecture programme carefully and mark dates in your diary to attend a few Summer Student Lectures!

All lectures are given in English and held in the Auditorium (unless otherwise indicated).

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