

Engineering and scientific computers until recently have been number-crunching machines, generating countless pages of numerical data output. Engineers and scientists now recognize the immense value of visualizing the output in highly interactive 3-D graphic form. Super-workstations are now available for 4-D visual simulation (3-D + time), and have rapidly increased the depth of scientific understanding of their users.

James H. Clark is Silicon Graphics' founder and Board Chairman. During the past 14 years he has developed hardware and software for advanced special-purpose graphics and CAD systems and holds the patent for the 'Geometry Engine'. For three years he was Associate Professor of Electrical Engineering at Stanford, where he led the VLSI research team that developed the Geometry Engine. James Clark holds a PhD in Computer Science and an MS in Physics from the University of Utah.

Friday 24 April

MEETINGS ON

PARTICLE PHYSICS PHENOMENOLOGY

at 11.00 hrs – TH Conference Room

Neutrino counting and the top mass from W and Z^0 production cross-sections at the collider

by D. DENEGRI / Saclay & UA1 Collaboration
and L. FAYARD / LAL, Orsay & UA2
Collaboration

TRAINING AND **EDUCATION** **ENSEIGNEMENT**

ACADEMIC TRAINING

Tel. 2844-3364

Academic Training Programme *3rd term*

18, 19, 20, 21 and 22 May

11.00 hrs to 12.00 hrs – LEP Auditorium
bldg 30, 7th floor

Please note change of place!

Dynamics of beam diagnostics

by A. HOFMANN / CERN-LEP

20, 21 and 22 May

11.00 hrs to 12.00 hrs – Auditorium

Dark matter and galaxy formation

by R. RUFFINI / University of Rome

Monday 27 April

EF SEMINAR

at 11.00 hrs – EF Conference Room
bldg 13, 2-005

News on detectors from the SLAC Conference

by Ariella CATTAI / Kerforschungsinstitut
Karlsruhe and CERN-EF

Du 4 au 7 mai & du 11 au 14 mai

SEMINAIRE EXCEL SUR MACINTOSH

- Deux semaines, du lundi au jeudi, à raison de huit demi-journées
- Les participants devront avoir les connaissances de base du logiciel EXCEL
- Nombre de places limité
- Pour tous renseignements et inscriptions, s'adresser à Mme W. HUG / EP, tél. 3367, le matin de 08.00 à 12.00 h.
- Date limite d'inscription le mercredi 15 avril 1987.

3, 4 and 5 June

11.00 hrs to 12.00 hrs – Auditorium

Hot topics in spectroscopy

by F.E. CLOSE / Rutherford Appleton
Laboratory

11 and 12 June

11.00 hrs to 12.00 hrs – Auditorium

Interaction of electrons with materials and fields

by K. POTTER / CERN-TIS

16, 17, 18 and 19 June

11.00 hrs to 12.00 hrs – Auditorium

Lattice gauge theories

by G. MARTINELLI / CERN-TH and
R. PETRONZIO / Max-Planck Institute,
Munich

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

**Programmable Logic Device
How to use them in practice**

Henning LARSEN / PS

Tuesday April 28 - 9 h.00
Room 11 (Amphi) - Bldg 593

There exists now a large number of Programmable Logic Devices (PLD's) in a variety of configurations (PAL, PLE, FPLA, GAL, EPLD, ...).

Using them in designs can give significant savings in cost and increase the flexibility of the circuit.

INFORMATIONS GENERALES GENERAL INFORMATION

PUBLICATION DU BULLETIN A PAQUES

Ceci est la dernière édition du Bulletin avant Pâques: il n'y aura pas de Bulletin distribué la semaine du Vendredi Saint.

L'édition suivante (no. 18/87) paraîtra le vendredi 24 avril. Les annonces de ce Bulletin doivent nous parvenir dès que possible, et en tous cas pas plus tard que les **délais normaux, mardi 21 avril à 12.00 heures.**

1er MAI : PUBLICATION DU BULLETIN HEBDOMADAIRE

A cause du 1er mai, jour férié, **le dernier délai du Bulletin hebdomadaire no. 19**, qui sortira le jeudi 30 avril, sera exceptionnellement avancé au **lundi 27 avril à midi.**

Nous vous remercions de votre compréhension.

Section Publications
Tél. 3475

ATTENTION! PILE OU FACE

Un de nos collègues, curieux et/ou économe, a tenté de recharger une pile plate alcaline (4,5 V, prix : 2,50.- FS).

Résultat

Explosion de la pile avec projection de matières au visage.

La leçon

Avant de vouloir recharger une pile, s'assurer qu'elle est **bien rechargeable** (c'est écrit dessus).

Commission TIS

The following subjects will be treated :

- Functionality of the most common PLD's
- The ABEL (Advanced Boolean Expressions Design Language)
- Some characteristic designs using ABEL
- Demonstration of the design process on a PC

This FORUM is aimed at helping the participants to understand and start using a big part of these PLD's in designs. It could also be followed by people who know PLD's, but not the ABEL design language.

The participants are invited afterwards to practice in making their own designs on the PC in the PS-CU groupe, to the extent it is available.

EASTER PUBLICATION OF WEEKLY BULLETIN

This is the last edition of the Weekly before Easter : there will be no Weekly Bulletin distributed in the week prior to Easter.

The next issue (No. 18/87) will be published on Friday 24 April. Announcements for this issue of the Bulletin should be sent in as soon as possible, and no later than the **usual deadline of noon on Tuesday 21 April.**

1st MAY : PUBLICATION OF THE WEEKLY BULLETIN

Because of the holiday on Thursday 1st May, **the deadline for material for publication in Bulletin No. 19**, which will appear on Thursday 30 April, will be brought forward to **midday on Monday 27 April.**

Thank you for your co-operation.

Publications Section
Tel. 3475

WARNING! ASSAULT AND BATTERY

In an attempt to satisfy his curiosity and/or to save money, one of our colleagues tried to recharge a dry battery (4.5 V, price : 2.50.- SFr.).

Result

The battery exploded, showering his face with debris.

The lesson

Before trying to recharge any battery, make sure that it is **actually rechargeable** (read what's written on it first).

TIS Commission