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7-14 February 1977

195 shuts down, but not for long!



Geoff Lambert throws the switch to shut down the IBM 360/195 computer in R1. Outside, trucks were already waiting to transport equipment over to its new home in the Atlas buildings, where it will be installed alongside the second 195 machine - called 195/2.

In the first stage of the move, peripheral units from the 195/1 - as the machine in Rl is called - are being transferred to the 195/2, so that a full computer service on the 195/2 can commence very shortly. Already the 195/2 has been available for selected user jobs.

The transfer of the 195/1 mainframe will follow, so that the full two-processor configuration can be up and running as soon as possible. While the peripheral equipment is being moved from R1 to the Atlas buildings (R26/R27), the usual friendly 195/1 service is closed, but arrangements have been made for essential data processing work to be carried out elsewhere.

Already congratulations have been received from all quarters on the smooth installation of the 195/2, and there's no reason why the rest of this huge job shouldn't be completed in an equally slick way.

INTERNAL EVENTS

SPECIAL SAFETY EXHIBITION I-15 February R2 Display Corridor.

A static display showing the hazards in the use, transportation and handling of high pressure gases stored in cylinders. It will be of interest to suppliers, handlers and users.

NIMROD LECTURE SERIES Monday 7 February 11.30 Lecture Theatre

The interest of Ultra-High Energies

F Halzen/Wisconsin & RL

THEORETICAL PHYSICS LECTURES

Monday 7 February 15.00 R61 Conference Room

Monday 21 February

15.00 R61 Conference Room Functional-Integral Formulations

Landon-Ginzburg-Wilson-Langer Models: Expressing the Universal Features of Phase Transitions in Simple Field Theories.

R C Arnold/Argonne & RL

The third and fourth in a series of lectures on collective phenomena and phase transitions.

HEP SEMINAR Wednesday 9 February 11.00 Lecture Theatre

₩ Meson States and Transitions

J D Jackson/CERN

HEP DATA HANDLING GROUP SEMINAR Wednesday 9 February 13.30

R61 Conference Room

The Northern Hemisphere Observatory Computer System.

J S Beale/RGO

An outline of the Computer System to be used at the NHO will be given. Most of the Seminar will be used to describe a new minicomputer CIRCE, designed and proven at Jodrell Bank and to be built by the staff of the Royal Greenwich Observatory, and FORTH, a new Real-Time Software System.

SEMINAR IN COMPUTING Friday II February R27 (Atlas) Colloquium Room Some Features of the Dual 195 System

R Taylor/RL

NIMRUD LECTURE SERIES Monday 14 February

11:30 Lecture Theatre Search for Charm in pp Interactions at 53 GeV CMS Energy

A Kernan/CERN

HEP SEMINAR

Wednesday 16 February 11.00 R61 Conference Room

High Energy Muon Scattering at Fermilab

V Bharadwaj/Oxford

HEP DATA HANDLING GROUP SEMINAR

Wednesday 16 February 13.30 R61 Conference Room

Symbolic Programming for Physics Problems using Algol

K V Roberts/Culham

The symbolic notation familiar in mathematical physics enables problems to be expressed much more concisely than has so far been possible with high-level programming languages such as Fortran. Using the notation of vector algebra and analysis as an example, this talk describes how Algol-60 has been used to achieve the required degree of conciseness and to generate optimised codes for production It concludes with a discussion on how far a similar result can be achieved runs. with Algol-68.

LASER DIVISION SEMINAR Wednesday 16 February R61 Conference Room

Laser-Plasma Interactions or Why some of our best friends are non-linear.

T P Hughes/Essex

NIMROD LECTURE SERIES Monday 21 February Lecture Theatre

Signatures for Charm Production in e⁺e⁻ Annihilation

S Matsuda/RL

EXTERNAL EVENTS

HEP SEMINARS/DAMTP, CAMBRIDGE - 1500 hrs.

10 F D B Fairlie/Durham - Search for instantons in Euclidean Yang-Mills Theories

17 Feb : A C Davis/Durham - Bags and the nucleon-nucleon interaction.

24 Feb : D H Perkins/CERN & Oxford - Deviations from scaling in elastic lepton-nucleon scattering.

ELEM. PART. THY SEMINARS/NP LAB, 0XFORD - 1430 hrs.

Il Feb : I H Dumbar/Bristol - Charmed Baryon Spectroscopy with Tensorial Operators.

PHYSICS SEMINAR/SOUTHAMPTON - 1430 hrs.

II Feb : Prof E Brezin/Saclay - Large order behaviour of perturbation series in Quantum Mechanics and Field Theory.

HEP SEMINARS/MANCHESTER - 1415 hrs.

10 Feb : H Muirhead/Liverpool - Antiproton physics.

THEOR PHYS SEMINARS/MANCHESTER

9 Feb 1430 hrs : P Goddard/Cambridge - Monopoles and their Quantum Numbers.

17 Feb 1615 hrs : B Buck/Oxford - Clustering in Light Nuclei.

HORTICULTURAL SOCIETY Thursday 21 April - day trip to York. Depart

Didcot/Oxford approx 8.30 am, returning approx 7.40 pm from York, for £5 return. This gives about 6 free-wheeling hours in York, or there is a guided coach trip for 89p extra. Dinner on return train, £3.80. Further information from Val Goodwin, ext 6256.

SALES TO EMPLOYEES Sales of scrap metal/plastics, as set out in RLN 12/73, will be made on 11 and 25 February.

NATIONAL SAVINGS CERTIFICATES Monthly cycle ending 31 January 1977. Certificates can now be collected from the Cash Office,

R20. Weekly cycle ending 29 January 1977. Certificates can be collected with effect from 7 February 1977, from the Cash Office, R20. New members, or those wishing to change the amount of their savings, should do so as soon as possible. The necessary form is available at the Cash Office, R20.

FILM BADGE NOTICE It is Period 2. Colour Strip
YELLOW for βγ films and neutron

packs. Please check that you are wearing the correct dosimeters and all old ones are returned.

Anyone requiring a new $\beta\gamma$ film holder please contact The Film Service, Ext 430.

PHYSICS COLLOQUIUM/BRISTOL - 1700 hrs.

DEPARTMENTAL COLLOQUIA/READING - 1700 hrs.

HEP SEMINARS/CAVENDISH LAB, CAMBRIDGE - 1500 hrs.

9 Feb : G Karl/Guelph & RL - Parity Violation in Atoms and all that.

16 Feb : P Grossman/Oxford - Results of the High Statistics Bubble Chamber Experiment on 4.2 GeV/c K p Interactions.

PART. PHYS. SEMINAR/NP LAB, OXFORD - 1430 hrs.

10 Feb : Prof J D Jackson/Berkeley & CERN - on understanding Spin-Flip Synchrotron Radiation and the Transverse Polarisation of Electrons in Storage Rings.

RAPID RESPONSE

This is the name of the new newsletter aimed at users of the SRC's

Interactive Computing Facility, managed by the Rutherford Laboratory. The first issue is now out, and people not on the mailing list but who would like a copy should contact the Editor - Peter Smith - in R27 (Atlas).

Rapid Response has a distinctive red masthead to distinguish it from the RL Bulletin, but uses a similar design and is easily recognised as coming from the same stable. One interesting production point - the text is prepared and typeset using the RL FR80 microfilm generator.

OVERSEAS VISITS

A R Mortimer & W T Smith, to DESY, 14-17 February, for design discus-

sions for DESY experiment.

 $\mbox{Dr}\ \mbox{R}\ \mbox{P}\ \mbox{Hand, to CERN, 6-14 February, for work on software for hyperon experiment.}$

 \mbox{Dr} D Quarrie, to DESY, 7-8 February, for PETRA collaboration meeting.

M G Albrow, to CERN, 14-17 February, for meeting of ISR committee.

Drs J J Thresher and J M Valentine, to DESY, 7-9 February, for discussions.

Dr R J N Phillips, to DESY, 16-18 February, for discussions. D C Salter, to ILL, 13-18 February, for technical liaison.

IDEAS INTO ACTION: COMMUNICATION AND R&D

The Research and Development Society's 1977 Symposium will be held on Tuesday 26 April 1977 at The Royal Society, London SW1, and the topic will be IDEAS INTO ACTION: COMMUNICATION AND R&D.

The programme for the morning session, under the Chairmanship of the President, Sir George Porter, will be:-

KEYNOTE ADDRESS - THE HUMAN ELEMENT IN COMMUNICATION Dr C Margerison (Professor of Management Development, Cranfield).

MAKING THE BEST USE OF COMMUNICATION TECHNIQUES Mr B Blunden (Director, Information, Training and Techno-Economics Division, PIRA).

THE INFLUENCE OF LABORATORY ORGANISATION AND LAYOUT Mr F P Doyle, OBE (Group Research Director (Ethicals) Beecham Group).

The programme for the afternoon session (Chairman: Dr W Wilson, Chairman of the Society) will be:-

GETTING THE BOARD TO ACT Mr John Williams (Managing Director, BOC Ltd). TELLING THE OUTSIDE WORLD Dr T I Williams (Editor, Endeavour).

The Symposium opens at 10.30 and will close at 17.30. There will be ample time for discussion throughout the day. Following the Symposium there will be a special Symposium Dinner at 18.30 for 19.00.

The fee for the Symposium is £20.00 for Members, £30.00 for non-Members, including light refreshments. buffet luncheon and copy of the Proceedings.

Further details and application forms are available from the Administrative Secretary, The Research and Development Society, 47 Belgrave Square, London SWIX 8QX.

TRADE EXHIBITION

Tektronix Terminal Display Group will be presenting their range of graphics products on Tuesday 15 February in R2O car park. Besides non-intelligent terminals there will be the recently announced 4051 desk top computer system with its associated peripherals. Also being demonstrated as the highlight of this Tektronix Exhibition will be the new 4081 Graphic Work Station which combines refreshed and stored graphics in a single computer based system. This new technology is achieved by the 4081's two computers, one a miniprocessor with 32,000 8-bit-bytes of core and the other a special micro-processor for display control. Both are housed in a deskstyle unit which includes a 19 inch display, a tape cartridge drive, an ASCII keyboard, 12 function keys, a joyswitch, and an RS-232-C communications interface.

DISPLAYS The Institution of Electrical Engineers is organising a conference - 'Displays for Man - Machine Systems' - at the University of Lancaster from 4-7 April. Further information and/or application forms are available from:-

Conference Department IEE Savoy Place London WC2R OBL.

COMING ATTRACTION

The Rutherford Laboratory Lecture on Thursday 24 February features Professor Eric Laithwaite from Imperial College, London. Prof Laithwaite is a prolific writer and broadcaster, and is well-known for his many TV appearances. He came to RL in 1973, when many people will remember his talk and accompanying demonstrations on Three Dimensional Engineering.

This time his subject is 'Gyroscopes' - more details in the next issue of the Bulletin.

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