



**17 February - 3 March 1975**

**bulletin**



# INTERNAL EVENTS

## NIMROD LECTURE SERIES

Monday 17 February  
11.30  
Lecture Theatre

$\pi^+$ d Interactions at 4 GeV/c, and the Production of Vector and Tensor Mesons

Dr R Sekulin/RL

## TRADE DEMONSTRATION

Monday 17 February  
09.30-15.30  
Building R20 lay-by

A mobile exhibition from J J Lloyd Instruments Ltd will be visiting the Laboratory to demonstrate precision electrical calibration and test equipment plus graphic recording instruments.

## HEP SEMINAR

Wednesday 19 February  
11.00  
Lecture Theatre

Spin of Leading Clusters and Slope of the Overlay Function

N Sakai/RL

## NIMROD LECTURE SERIES

Monday 24 February  
11.30  
Lecture Theatre

Diffraction Scattering at Infinite Energies

Dr J S Ball/CERN

## HEP SEMINAR

Wednesday 26 February  
11.00  
Conference Room R61

Isobar Model Analysis of  $K^-n$  giving  $K^-\pi^+p$ ,  $K^0\pi^0n$  in the Centre of Mass Energy Region 1.90-2.17 GeV

M Corden/Birmingham

## SEMINAR IN COMPUTING

Friday 28 February  
11.00  
Conference Room R12  
(not R61 as previously advertised)

Computer Assisted Learning Projects in Medicine and Mathematics or  
How to Kill Programs and Not People

D B Scott/Glasgow University Computing Service

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## NATIONAL SAFE DRIVING AWARDS

This is the time of the year when the National Safe Driving Awards are announced. The National Scheme, started in 1927 by the Royal Society for the Prevention of Accidents, attracts huge entries each year and the Awards are highly valued. It is therefore a pleasure each year to record the Laboratory's drivers achievements. The awards for 1974 go to:-

Mr H Patterson	- Bar to 15 year Medal (18 accident free years)
Mr E A Smith	- Bar to 10 year Medal (12 years)
Mr A Hill	- Bar to 10 year Medal (11 years)
Mr J Culley	- 10 year Medal
Mr R E Smith	- Bar to 5 year Medal (8 years)
Mr D Stock	- Bar to 5 year Medal (8 years)
Mr B T Field	- First Year Diploma

## OBITUARY NOTICE

We deeply regret to announce the death on 6 February 1975 of Sam Harris, Atlas Laboratory. Sam was one of the first people to be engaged as an operator in the early Harwell days of the Mercury computer and, in fact, joined Dr Howlett and James Hailstone on 29 December 1958.

He had been in fairly poor health for a number of years but in spite of this had given the Atlas Laboratory excellent service in looking after their large communications switchboard. A lot of users have commented on the unfailing help and friendliness which they had from Sam. We extend our deepest sympathy to his wife.

## RUTHERFORD LABORATORY BULLETIN

Published by the Scientific Administration Group

Editor: H F NORRIS

Deadline for  
Insertions

GENERAL & SOCIAL NEWS

INTERNAL & EXTERNAL EVENTS

Tuesday 1600

Wednesday 1200

Room 42 Building R20  
Rutherford Laboratory  
Chilton Didcot Oxon  
Abingdon 1900 Ext 484



# EXTERNAL EVENTS

## THE CONSERVATION SOCIETY OXFORD BRANCH

BLACKFRIARS' MEETING ROOM, ST GILES - 20.00 hours

19 Feb: Nuclear Power, What are the Dangers? - Dr B A J Lister/Head of Nuclear Environment Branch, AERE, Harwell. The talk will be introduced by Dr J D Lawson/Conservation Society and will be followed by a discussion. All are welcome.

## OXFORD UNIVERSITY

THEORETICAL ELEMENTARY PARTICLE PHYSICS SEMINAR/N.P. DEPT - 14.20 hours

21 Feb: Principles of Supersymmetry - Professor L O'Raifeartaigh/IAS, Dublin.

THEORETICAL PHYSICS SEMINARS/CLARENDON LABORATORY - 16.15 hours

20 Feb: New Particles, Old Ideas and Fresh Hopes - Dr D Broadhurst/Oxford.

27 Feb: The Relativistic Quark Model - Professor R Moorhouse/Glasgow.

COLLOQUIA/CLARENDON LABORATORY - 16.15 hours

21 Feb: Some Applications of Superconductivity, in Particular the Japanese High Speed Rail Project - Professor K Oshima/Director General for Scientific Affairs, OECD, Paris.

28 Feb: The Energy Balance of the Solar Corona and Transition Region - Dr R W P McWhirter/Appleton Lab, Culham.

LOW TEMPERATURE AND SOLID STATE PHYSICS SEMINAR/CLARENDON LABORATORY - 14.30 hours

20 Feb: Heat Pulses in Paramagnetic Crystals - Dr K Wigmore/Lancaster University.

## ROYAL HOLLOWAY COLLEGE

APPLIED MATHEMATICS SEMINAR/MATHS DEPT, MAIN BUILDING - 15.00 hours

20 Feb: On Hypersonic Self-Induced Separation - Dr S M Brown /UCL.

## MANCHESTER UNIVERSITY

THEORETICAL PHYSICS SEMINAR/NIELS BOHR COMMON ROOM - 15.45 hours

26 Feb: Meson Spectroscopy - Dr A D Martin/Durham.

## SURREY UNIVERSITY

NUCLEAR PHYSICS SEMINARS/ROOM 08 AC 22 - 14.15 hours

19 Feb: Single-Nucleon Transfer in Heavy-Ion Reactions - M A Nagarajan/Daresbury.

26 Feb: Title to be announced - F S Levin/Surrey - Brown University.

## SUSSEX UNIVERSITY

NUCLEAR PHYSICS SEMINAR/PHYSICS BUILDING, ROOM PB - A6 - 14.15 hours

17 Feb: The  $\beta$ -Decay of  $^{14}\text{B}$  - Dr J Millener/Oxford.

LOW TEMPERATURE AND SOLID STATE SEMINAR/ROOM 4A25 - 14.15 hours

18 Feb: The Place of Superconducting Machines in Industry - Dr A D Appleton/Int. Res & Dev Co Ltd.

## QUEEN MARY COLLEGE

THEORETICAL PHYSICS SEMINARS/PHYSICS LECTURE THEATRE - 16.15 hours

17 Feb: Is There a Superfluid Velocity in  $\text{He}^3$ ? - Professor H E Hall/Manchester.

24 Feb: Theory of Ferromagnetism in Transition Metals - Professor J Callaway/Louisiana & Imp Coll.

## DARESBURY LABORATORY

DARESBURY LECTURE SERIES/LECTURE THEATRE - 14.00 hours

18 Feb: Some Problems of Collective Motion in Nuclei - J C Willmott/Manchester

25 Feb: Title to be announced - J S Ball/Utah - CERN.

THEORETICAL PHYSICS SEMINAR/OLD CONFERENCE ROOM - 14.00 hours

24 Feb: Off Mass Shell States and Currents in the Dual Model - D B Fairlie/Durham

## EVENTS AT AERE HARWELL

NUCLEAR PHYSICS DIVISION COLLOQUIA/CONFERENCE ROOM, HANGAR 8 - 15.30 hours

20 Feb: The Role of Oxides in the High-Temperature Wear of Alloys - Professor G C Wood/UMIST.

27 Feb: Title to be announced - Dr V Schonfelder/Max Planck Institute for Extra-Terrestrial Physics.

THEORETICAL PHYSICS DIVISION SEMINARS/CONFERENCE ROOM, BUILDING 8.9 - 14.00 hours

18 Feb: Infra-Red Absorption from Impurity Complexes in Semiconductors - Dr R Newman/Reading.

25 Feb: Accidents in Fast Reactors - Mr F R Farmer/Director, SRD, Culcheth.



This is equivalent to 105% of the operating current (103 amperes).

The above tests were carried out in a helium bath temperature of 4.2K. To simulate the actual operating conditions, where a closed circuit refrigeration system will be used to minimise running costs, the liquid helium temperature was raised to 4.45K by pressurising the cryostat (approx. 1.3 bars absolute). The coils were run up again to 2.62 Tesla and held at this field for 30 minutes.

The coils will now be assembled into the specially designed magnet cryostat, coupled to the CTI 1400 refrigerator and given a final test with the target assembly, prior to moving the whole equipment to Hall 3.

This project was carried out by staff from the Department of Engineering Science and Applied Physics Division. Very valuable support was given by other departments in the Laboratory, in particular the R9 Workshop and the Outside Manufacturing Group.

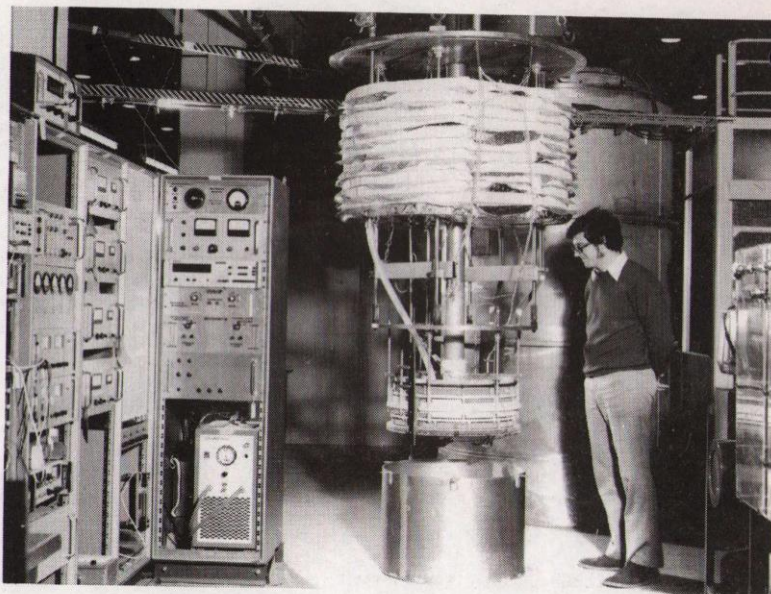


fig 2 - general layout of the test facility

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**SLIDE LIBRARY** The central slide library is now located in the Microfiche area of the main library. About 1000 slides are filed in negative number sequence. A file of reference prints arranged under subject headings permit rapid location of the slides. The slides can be borrowed provided details are given in the slide loan book. For further information please contact Mr F Harden, Ext 6114.

**FILM BADGE NOTICE** It is Period 2. Colour Strip - PURPLE for 8y films. NOTE that it is no longer necessary for neutron packs to be worn due to the Nimrod shutdown. Please ensure that all these packs have been returned.

Next Film Change - Monday 24 February 1975.

**WHERE ARE THEY?** Will owners or anyone else knowing the whereabouts of the following IBM I/O writers, serial numbers - 804116, 99733, 99827, 802425, please contact M J Hotchkiss, Building R1, Ext 6238.

**OVERSEAS VISITS** Mr H O Normington and Mr C Page to CERN, 17 February, to continue dismantling of Muon experiment on ISR.  
Dr G E Kalmus, to CERN, 18-22 February, to attend CERN Track Chamber meetings and for discussions on BEAM and BEBC schedule.

Mr D Jones, to Brussels, 24-27 February, to attend CAMAC meeting.

Dr N Sakai, to France, 1-9 March, to attend M6ribel Conference.

The Director, to the USA, 2-8 March, to attend Seminar on Perspectives in High Energy Physics, New Orleans.

## SOCIAL NEWS

**MESSAGE OF THANKS** A letter has been received from Nellie Neal asking for the following message to be put in the Bulletin -

"I should like to say thank you very much to the many people who contributed towards the lovely gifts presented to me on my leaving the Laboratory. I am sorry I could not thank everyone personally. My 9½ years at the Laboratory have been very happy ones."

**CHRISTIAN FELLOWSHIP** Pastor Brian John of Wantage Baptist Church will be leading the second meeting on the theme of LOVE. What is true love and how can we experience this in our lives in both giving and receiving? What is Christian love and how does it differ from other sorts? All are welcome to come along at 12.30 on Friday 21 February to the R12 Conference Room.

On Friday 28 February, John Thewlis of the Atlas Laboratory will be chairing a meeting in which members of the Fellowship will share their views and experiences of Christian LOVE and JOY. All are welcome to come along. The meeting is at 12.30 in the R12 Conference Room.

**HORTICULTURAL SOCIETY EVENING LECTURE** After a long interval the Society is presenting an evening lecture on Tuesday 25 February at 7.45 pm. The speaker is Mr K Burras, NDH, the Superintendent of the Oxford Botanic Gardens and the title of his lecture is "Plant Hunting in South Africa." His previous lectures have always attracted a large audience and the Society hopes that as many members and friends as possible give their support to this evening. Ken Burras not only gives extremely interesting talks but his colour slides are a pleasure to watch. Tickets at 25p are available from Val Goodwin, R1, Roy Brabben R20 or the Editor.