



Rutherford
Laboratory

R(12), NDT(60,3), ISW(3500), ANGLE(60), YINT(60), DUMMY(84),
(6,3), 30 October - 6 November 1972
MMON/CFID/MFX(20,3), MEY(20,3), NFDX(10,3), NFX(3), NFD(3), I
B(2,20,3), NX(100,4), NY(100,4), XN(2), YN(8), IR(100,2), IDJ(
DY(100,2), JDJ(4), JDY(4), IHS(4), IOV(2), TUN(2), DE
CF(16), IFS, NFS, FX, FY, JK, PIC, KPTC, NCOUNT, NBIN, MA, V, XUN
AXN, CTA, CTB, MX, MY, JA, JB, JC, JD, JE, JF, XF(20,3), YE, O
MMON/CJACK/NSY(20,30), NMS(20), NDR(20), NTR(20), YA
(20), BX(20), NST1(20), NST2(20), INER(20), 36 bulletin

RUTHERFORD LABORATORY LECTURE

The next lecture in this series will be given by Professor C Freeman of the Science Policy Research Unit, University of Sussex at 3.15 pm on Thursday 2 November in the Lecture Theatre.

His talk will be entitled "Technical Progress and Limits of Growth".

The MIT "World Dynamics" and "Limits to Growth" models represent the most ambitious attempt so far to bring together forecasts of population growth, resource depletion, food supply, capital investment and pollution into one general model of the world. In view of the wide interest this MIT work has attracted and the importance of the issues it raises, it deserves thorough and constructive criticism. A team at the Science Policy Research Unit has been working on a systematic review of the model and this talk will present some of the results.

For your diary - "The Strange Journey from Retina to Brain", the title of the next lecture in this series, which is to be given by Dr R W G Hunt of Kodak Ltd on Thursday 14 December.

EXHIBITION IN R1 FOYER

An exhibition is being arranged, to open during the current week in R1 foyer of the target used in the 1.5 metre cryogenic bubble chamber. Bulletins number 29/72 and 34/72 give details of experiments which used this particular target and Bulletin 43/71 gave a full description of the technique.

WENDY DANCE SAYS GOODBYE TO THE LAB

Wendy Dance left on Friday 20 October after working at the Laboratory for six years, five of those as a Personal Secretary.

She has, however, been around the old airfield site a lot longer than that suggests as she first joined Harwell in 1957. Following a spell at Bracknell she returned in 1959, still as a member of Harwell's staff, to Building R2 where she was secretary to Dr Kandiah. She eventually left in 1964.

Wendy had a lot of fun for nearly a year at an estate agent helping to sell houses. It was following this period that she returned once again to the Downs but this time as a member of the Rutherford Laboratory staff.

Wendy has asked for the following expression of her thanks to be published:-

"I wish to thank all my acquaintances who so kindly contributed towards my surprise leaving present (a beautiful gold plated set of Papermates and a cheque - the money will be used to purchase some stereo records).

I am sorry I did not manage to thank you all personally and say goodbye to those of you who have helped me considerably in my duties. It has been a pleasure working with you."

LAST 'POST' FOR HILDA

A life of 'ins' and 'outs' comes to an end today, Friday 26 October, for Hilda Prior when she will be making her last journey around Building R2 to deliver and collect the mail before retiring.

Hilda was employed at the Air Ministry Maintenance Unit at Milton for twelve years before joining Harwell in 1959, transferring to the Rutherford Laboratory in 1961. After three years in R1 she moved over to R2 when it was opened, and for over eight years has filled up the 'in' trays and emptied the 'out' trays; one could say she has become a movable fixture in R2.

Hilda says she will miss all her customers but we are also sure they will miss her.

However she has organised another job for herself and starts work on Monday in Abingdon this time dealing with one of those well known 'wares'.

We are sure that all her friends and colleagues will join with us in wishing Hilda every success in her new post.

FILM BADGE NOTICE

Period 12 commences Monday 30 October. Colour Strip - BROWN for 8y and fast neutron packs. Six monthly TLD change for people with surnames commencing S, T, U, V. Please change all dosimeters promptly and return all old ones.

OVERSEAS VISITS

Dr C J Batty, to Israel, 29 October - 17 November for discussion on joint work with the Hebrew University, Jerusalem and to lecture at the Hebrew University, Weizman Institute and

news continued on page 4

INTERNAL EVENTS

NIMROD LECTURE SERIES

Monday 30 October
11.30
Lecture Theatre

Lepton Physics at 300 GeV

Dr E Gabathular/Darèsbury

300 GEV SEMINAR

Monday 30 October
14.30
Conference Room, Building RI

Further report on the ECFA Study Week at Tirrenia
(c) Lepton Physics - *R M Brown*

(d) Physics with Bubble Chambers - *C M Fisher*

SPECIAL HEP SEMINAR

Tuesday 31 October
11.00
Conference Room, Building RI

Inclusive Reactions in the Dual Models

Professor K Kang/Brown University, USA and University of Paris

HEP DISCUSSION GROUP

Wednesday 1 November
11.00
Lecture Theatre

Recent Developments in Neutrino Physics

Professor D Perkins/University of Oxford

FILM SHOW

Wednesday 1 November
13.15
Thursday 2 November
12.40
Lecture Theatre

We Came in Peace - a 39 minute, colour film.

Space travel has a fascination for most of us but already journeys to the moon and back, if free from incidents, are becoming less and less newsworthy. The space age only really began fifteen years ago this month with the launching of Soviet Sputnik 1, on 4 October 1957, the first artificial satellite. Sputnik 2 was launched shortly after, on 3 November and carried a dog named 'Laika'. Man's efforts to conquer space is the subject of this weeks film; his successes and failures from the earliest days up to the first landing and walk on the moon.

RUTHERFORD LABORATORY LECTURE

Thursday 2 November
15.15
Lecture Theatre

Technical Progress and Limits to Growth

Professor C Freeman/University of Sussex

SEMINAR IN COMPUTING

Friday 3 November
11.00
Conference Room, Building RI

Other Programming Languages Available at RHEL

C D Osland/RHEL and ICS

NIMROD LECTURE SERIES

Monday 6 November
11.30
Lecture Theatre

Unexpected Results in Radiative Pion Scattering or 'Lower than Low'

Professor B Nefkens/UCLA

NIMROD SCHEDULE

CYCLE 14 31 10 72 - 21 11 72

MACHINE PHYSICS

HIGH ENERGY PHYSICS

<u>Team</u>	<u>Beam</u>	<u>Experiment</u>	<u>State</u>
RHEL/UCL/Berkeley/ Torino	K9	4 GeV/c π^+p interactions in track sensitive target	Data
Bristol Univ/ Southampton Univ/RHEL	K15 π^8	K^+p and π^+p Differential Cross-Sections Tests for L/I 63	Data Setting up
Churchill Hospital Oxford/RHEL	π^{11}	Radiobiological Experiment	Data
Glasgow Univ/RHEL	π^9 P71	Polarisation Measurements in π^-p Charge Exchange Tests on Gas Cerenkov for RHEL/ISR Experiment	Setting up
Imperial College/ Southampton Univ	π^7	Studies of η ω and A2	Data

EXTERNAL EVENTS

NUCLEAR STRUCTURE SEMINAR
Monday 30 October
14.30
Nuclear Physics Laboratory
Oxford

Some applications of Photographic and Printing Techniques in the Physics Departments (with demonstration)

Mr C Band/Clarendon Laboratory, Oxford

THEORETICAL PHYSICS SEMINAR
Monday 30 October
16.15
Queen Mary College

A new Phase Transition in Liquid He³

Dr A J Leggett/Sussex

DARESBURY LECTURE SERIES
Tuesday 31 October
14.00
Daresbury N P Laboratory

Scaling in Pion Electroproduction

N Dombey/Sussex

THEORETICAL PHYSICS SEMINAR
Wednesday 1 November
14.30
University of Manchester

Collapsed Nuclei

Dr A Bodmer/Argonne

APPLIED PHYSICS COLLOQUIUM
Wednesday 1 November
16.30
University of Reading

From Van de Graaff to the Laddertron

N G Joyce

ELEMENTARY PARTICLE PHYSICS COLLOQUIUM
Thursday 2 November
14.15
Nuclear Physics Laboratory
Oxford

Topics from the 1972 High-Energy Physics Conference at Batavia

Dr J E Paton and Dr G Salmon/Oxford

ASTROPHYSICS SEMINAR
Thursday 2 November
14.30
Dept of Astrophysics, Oxford

The Meaning of Quantum Cosmology

Dr C J Clarke/DAMPT

THEORETICAL PHYSICS SEMINAR
Thursday 2 November
16.15
Clarendon Laboratory, Oxford

Perturbation Calculations on the Indium Isotopes

Dr B Atalay

COLLOQUIUM
Friday 3 November
16.15
Clarendon Laboratory, Oxford

Superconducting Machines for the Power Industry

Dr A D Appleton/IRDC, Newcastle on Tyne

EVENTS AT AERE

THEORETICAL PHYSICS SEMINAR
Tuesday 31 October
14.00
Conference Room, Building 8.9

Thermoelectricity in Liquid Conductors

Professor J E Enderby/University of Leicester

RUTHERFORD LABORATORY BULLETIN

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Deadline
for
Insertions

GENERAL & SOCIAL NEWS
Tuesday 1600

INTERNAL & EXTERNAL EVENTS
Wednesday 1200

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

EXTERNAL EVENTS

Tel-Aviv University.

Dr J J Thresher, to CERN, 29 October - 1 November, to attend ECFA meeting.

Dr G C Stirling, to Grenoble, 30 October - 13 November for discussion on neutron beam installation at ILL.

SOCIAL NEWS

FOLK CLUB

Friday 27 October at 8 pm in the Coffee Lounge R22

Tommy Giffelon - Traditional Folk Singer

CHRISTIAN FELLOWSHIP

All welcome to join us for a time of intercession supplication and thanksgiving at our monthly prayer meeting led by Derek Smaje. We meet at 12.30 pm in the R12 Conference Room.

RECORD SOCIETY

Record programme Tuesday 31 October at 12.40: Mozart Symphony No 40.