



Rutherford  
Laboratory

R(12), NDT(60,3), ISW(3500), ANGLE(20), IN(20), DUNNY(10),  
(6,3), NACHT(48), XCEN(12), YCEN(12), ARS(12), TCH(12), AR  
MMON/CFID/MFX(20,3), MFY(20,3), NFDX(10,3), NFX(3), NFD(3), I  
B(2,20,3), NX(100,4), NY(100,4), XN(2), YN(8), IB(10,2), XI  
DY(100,2), JDX(4), JDY(4), IHS(4), IOV(2), IUN(2), I(2), DE  
CF(16), IFS, NFS, FX, FY, JK, PIC, KPIC, NCOUNT, NBIN, MA, V, XUN  
AXN, CTA, CTB, MX, MY, JA, JB, JC, JD, JE, JF, XF(20,3), YF(0,  
MMON/CJACK/NSY(20,30), NMS(20), NDR(20), X(2), Y(2), YA  
(20), BX(20), NST1(20), NST2(20), INER(20), NSX(20,30), AWT(60

7-14 May 1973

bulletin

17

#### PERIODICAL SAFETY TEST OF PORTABLE ELECTRICAL EQUIPMENT

The test carried out during March 1973 has now been completed. The current marker colour is YELLOW and marked 'Do not use after July 1973'.

Portable electrical equipment that is marked otherwise or has no marker should be considered unsafe and MUST NOT BE USED.

All such items should be returned if possible to Electrical Services Section Building R18. Alternatively ring A Hipwell on Ext 573.

#### UNCLAIMED GIFT?

A parcel containing two Stainless Steel Dishes and Stainless Steel Ladle await collection at R56, R and D Stores. The parcel is addressed to Dr Royce-? and the sender is a Dr Gruna Field of Germany or the general neighbourhood. Would any claimant please contact R56 Store, Ext 412.

#### FILM BADGE NOTICE

It is Period 5. Colour Strip - YELLOW for  $\beta\gamma$  films and neutron packs. Please check that you are wearing the correct films and that all old ones are returned.

#### MESSAGE OF THANKS

Mr and Mrs Tom Jones and family wish to thank everyone for the messages of sympathy and floral tributes sent in their recent bereavement. Please accept this as a personal acknowledgement.

#### THE LAB'S LOSS IS WARNEFORD'S GAIN

Peter Titterton, who was an electrical fitter in the Nimrod Power Supplies and Ancillary Plant Group left the Laboratory on Friday 27 April to take up a post as an Assistant Engineer at Warneford Hospital, Oxford. This hospital is a member of the Isis Psychiatric Hospital Group.

Peter joined the Laboratory in May 1966 from Skelton Bar, Iron and Steel Works. He was involved with all the varied work of the Group, but will probably remember two projects in particular. These are the "New Grid Control Gear" for the Mutators and the "New Master Timer".

On behalf of his friends and colleagues Mr T J Packer presented Peter with a calendar watch and a Parker pen and wished him well in his new appointment.

Peter thanked all those who had contributed towards the presents and said he had enjoyed working at the Laboratory. He would be pleased to meet his friends and colleagues again - but hoped that it would not be in the course of his work!

#### MISSING ???

Bill Burniston reports that a large chromium plated (approx 8" diameter) ashtray inscribed N Taylor (Engineering) Ltd on the rim is missing from his office. He would be very pleased if it reappeared in Room 1.59 in Building R1 Link.

#### NIMROD SHUTDOWN IS OVER

Nimrod started up again on 24 April, recommissioning will continue until 15 May when Cycle 4 is due to commence. Details of this schedule will be given next week.

#### MISSING EQUIPMENT

The following item of equipment has been removed from Office 0.05 in R1.

10" Electric Desk Fan Serial No 14/2213, AERE No 10423.

Will anyone with information on the present whereabouts of this item please inform Mr S Spinner, Extension 6192

#### OVERSEAS VISITS

Dr L C W Hobbis, to ILL Grenoble, 6 - 10 May for discussions.

Overseas Visits continued on page 4

## INTERNAL EVENTS

### NIMROD LECTURE SERIES

Monday 7 May  
11.30  
Lecture Theatre

Measurement of the Real Part in  $\pi^+ p$ ,  $K^+ p$ ,  $\bar{p} p$  Scattering Between 1 and 2.6 GeV/c  
by means of the Coulomb.- Nuclear Interference

*Dr M Ferro Luzzi/CERN*

### APPLIED PHYSICS LECTURE

Monday 7 May  
14.30 (note change of time)  
Lecture Theatre

What is EPIC?

*D A Gray/RHEL*

Major aims in the development of particle accelerators are the production of high total energies in particle interactions, with high interaction rates.

'EPIC', an Electron-Proton Intersecting Complex, is an

arrangement of interleaved magnet rings for accelerating electron and proton beams. Interactions with very high total energy occur at the intersection regions and several different types of interactions, ie  $e p$ ,  $e \bar{p}$ ,  $p p$  and  $e e$ , can be studied. Useful beam-beam interaction rates can be obtained with bunched beams and low  $\beta$  (small transverse beam size) techniques. Apart from optimising the energies of the component accelerators, there are problems of lattice design, beam-beam limits and method of production of low  $\beta$  insertions to be solved.

The status of the design and the relevant world developments will be presented.

### HEP DISCUSSION GROUP

Wednesday 9 May  
11.00  
Conference Room, Building R12

Investigations with Diffractive Exchange Models

*Dr J Kasman/Westfield College London*

### PROPOSAL LECTURE

Wednesday 9 May  
11.15  
Lecture Theatre

Proposal No 126:- "The Amplitude Analysis of  $\pi p$  and  $K p$  Interactions between 3 and 5 GeV/c", Westfield College/RHEL

*The talk will be given by Professor P March/Westfield College*

### NIMROD LECTURE SERIES

Monday 14 May  
11.30  
Lecture Theatre

(Title will be given next week)

*Dr R Stroynowski/CERN*

\* \* \* \* \*

### TELEPHONE DIRECTORY ALTERATIONS (2) (from 4 4 73 to 30 4 73)

#### AMENDMENTS

SIDLOW R	delete 318	add 6148	GOPAL DR G P	delete 6233	add 243 6632
MARREN V		add 6197	HALE MISS M C		add 6236 243
BARLOW DR J	delete 6123	add 248 6236	SEKULIN R L	delete 229	add 243 6632
BISHOP MRS A		add 248 6236	SHAH DR T P	delete 6150	add 248 6236
CHARLESWORTH J A	delete 229	add 243 6632	WIMBLETT R W	delete 6124	add 509
CONFORTO DR B	delete 6233	add 243 6632	EASTWOOD A W	delete 6684	add 6124
COUTHARD MRS P		add 248 6236	RIMMER V J	delete 205	add 6689
FRANEK DR B	delete 6123	add 248 6236	WYATT R W W	delete 205	add 6688

## STOP PRESS

### THEORETICAL PHYSICS SEMINAR

Friday 11 May  
14.20  
Nuclear Physics Lab, Oxford

Theories of Hypernuclear Systems

*Professor R Dalitz/Oxford*

# EXTERNAL EVENTS

## THEORETICAL PHYSICS SEMINAR

Monday 7 May

16.15

Queen Mary College

Spontaneously Broken Gauge Theories and Renormalisation

*Professor T W B Kibble/Imperial College*

## PHYSICS COLLOQUIUM

Monday 7 May

17.00

University of Reading

Random Networks and Amorphous Solids

*Dr M E Thorpe/Max-Planck Institut and Yale University*

## PHYSICS & GEOPHYSICS COLLOQUIUM

Monday 7 May

17.00

University of Bristol

Neutrinos from a Mixed-up Sun

*Dr D O Gough/Institute of Astronomy, University of Cambridge*

## DARESBUURY LECTURE SERIES

Tuesday 8 May

14.00

Daresbury Lecture Theatre

Neutrino Interaction in  $H_2$  and  $D_2$

*M Derrick/ANL and UCL*

## THEORETICAL PHYSICS SEMINAR

Wednesday 9 May

14.30

University of Manchester

Continuous Metal-Nonmetal Transitions in Disordered Materials

*Professor M H Cohen*

## THEORETICAL PHYSICS SEMINAR

Thursday 10 May

14.15

Clarendon Laboratory, Oxford

The Viscosity of Soapy Water

*Professor S F Edwards/Cambridge*

## COLLOQUIUM

Friday 11 May

16.15

Clarendon Laboratory, Oxford

The Problem of the Helium Film

*Professor J B Brown/University of Canterbury*

## EVENTS AT AERE

### THEORETICAL PHYSICS SEMINAR

Tuesday 8 May

14.00

Conference Room, Building 8.9

On the Use of Point Charge Models for Molecules

*Professor G G Hall/University of Nottingham*

### NUCLEAR PHYSICS COLLOQUIUM

Wednesday 9 May

15.30

Conference Room, Hangar 8

The Use of Fast Neutrons in Radiotherapy and Activation Analysis

*Dr D K Bewley/MRC Cyclotron Unit, Hammersmith Hospital*

### PROCESS TECHNOLOGY COLLOQUIUM

Thursday 10 May

09.00

Large Conference Room,  
Building 220.24

Patterns of Success in Innovation and Technology Transfer

*Mr P Jervis/University of Sussex*

RUTHERFORD LABORATORY BULLETIN

Published by the Scientific Administration Group

Editor: H F NORRIS

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

## OVERSEAS VISITS (contd)

Mr H O Normington and Mr A Chilvers, to CERN, 6 - 19 May, and Mr P Mackay and Mr W G A Russell to CERN, 7 - 25 May for installation work on the S120 experiment.

Mr G Simmonds, to CERN, 7 - 11 May, for discussions.

Dr C M Fisher, Dr R W Newport, Dr P R Williams and Mr P Wilde to Frascati, Italy, 7 - 12 May, to attend the 1973 International Conference on Instrumentation for High Energy Physics. Dr Fisher will extend his stay until 15 May for discussions on the proposed collaboration on Proposal 119.

## SOCIAL NEWS

### SEVEN-A-SIDE RUGBY - A STORY WITH AN INTERESTING END

For very many years now the Rutherford Laboratory have been entering a side in the AERE club tournament which is held every Spring. We've never had much success but this year we fielded the following team:

Euroff Thomas	R3	Malcolm Edwards	R1
Jim Homer	R1	Mike Yates	R25
Peter Doe	R1	Brian Mack	R25
Peter Dearlove	R25	John Potter	(guest from Didcot)

The Laboratory reached the final with three excellent wins and then unluckily lost in the final itself to "Grantage", a team made up of Wantage and Grove players who had already been beaten in one of the earlier rounds by the Rutherford Lab team and who had only just qualified as the best of the first round losers. (Grantage - sounds like one of those sporting schools which produced Harry Wharton and Bob Cherry and company. Readers under eighty should disregard this comment - Ed.)

Malcolm Edwards had a try under the posts disallowed which would have settled the issue but all credit to the team and their 'injured' supporters, Colin Uden and Martin Evans - one of whom was sufficiently recovered to play in a match against the AERE Ladies. The Ladies won 9 - 0. (Mixed rugby has a great future).

### RECREATIONAL SOCIETY DANCE

The next rave up is on Friday 18 May. Dancing to Billie Collins and her band, from 8 to 1 am. Buffet and fully licenced bar. Tickets 70p from:-

Miss T Batchellier - R34, Mrs V Goodwin - R1, Mrs M Stoker - R1,  
Mr F Cooke - R9 and Mr P Craske - R2.

### RUTHERFORD FOLK CLUB

The next meeting of the Folk Club is at 20.00 hours on Friday 4 May in the Restaurant Coffee Lounge, tickets at 25p.

Roger Sutcliffe is the featured artist

### CHRISTIAN FELLOWSHIP

Dennis Martin will be leading the Fellowship in a book review. All are welcome to come along and the meeting as usual, commences at 12.30 in the R12 Conference Room. The date - Friday 11 May.