



COMMON/CSCAL/CTRM, NERR, NCIL, NCAP, TSCAN, NRR, NGR, NSCAN1, NRC  
11YSEL, IYSEL, IYMAX, 18 March-1 April 1974  
2NREGIN, NTK, NIDY, NMIS, NSSP, NEDD, MAXMJK, NIPST, NEMD, JER  
COMMON/CHTD/MEX(24,3), MEX(30,3), NEDX(12,3), NEX(3), NED(3)  
QTAR(2,30,3), NY(100,4), NY(100,4), XN(2), YN(9), TA(100,10)  
R TOY(100,2), JOX(4), JOY(4), IHS(4), IOV(2), IUN(2), IOV(1), I  
S NCF(16), TES, NES, FY, FY, JK, PIC, KPIC, NCGUNT, NBIN, MA, MAX  
T MAXN, CTA, CTR, MX, MY, JA, JB, JC, ID, JF, JG, JH, JI, JJ, JK, JL, JM, JN, JO, JP, JQ, JR, JS, JT, JU, JV, JW, JX, JY, JZ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ, KL, KM, KN, KO, KP, KQ, KR, KS, KT, KU, KV, KW, KX, KY, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LI, LJ, LK, LL, LM, LN, LO, LP, LQ, LR, LS, LT, LU, LV, LW, LX, LY, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MI, MJ, MK, ML, MO, MP, MQ, MR, MS, MT, MU, MV, MW, MX, MY, MZ, NA, NB, NC, ND, NE, NF, NG, NH, NI, NJ, NK, NL, NO, NP, NQ, NR, NS, NT, NU, NV, NW, NX, NY, NZ, OA, OB, OC, OD, OE, OF, OG, OH, OI, OJ, OK, OL, OM, ON, OO, OP, OQ, OR, OS, OT, OU, OV, OW, OX, OY, OZ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, PK, PL, PM, PN, PO, PP, PQ, PR, PS, PT, PU, PV, PW, PX, PY, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QI, QJ, QK, QL, QM, QN, QO, QP, QQ, QR, QS, QT, QU, QV, QW, QX, QY, QZ, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, RK, RL, RO, RP, RQ, RR, RS, RT, RU, RV, RW, RX, RY, RZ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SQ, SR, SS, ST, SU, SV, SW, SX, SY, SZ, TA, TB, TC, TD, TE, TF, TG, TH, TI, TJ, TK, TL, TM, TN, TO, TP, TQ, TR, TS, TT, TU, TV, TW, TX, TY, TZ, UA, UB, UC, UD, UE, UF, UG, UH, UI, UJ, UK, UL, UM, UN, UO, UP, UQ, UR, US, UT, UY, UZ, VA, VB, VC, VD, VE, VF, VG, VH, VI, VJ, VK, VL, VO, VP, VQ, VR, VS, VT, VY, VZ, WA, WB, WC, WD, WE, WF, WG, WH, WI, WJ, WK, WL, WO, WP, WQ, WR, WS, WT, WY, WZ, XA, XB, XC, XD, XE, XF, XG, XH, XI, XJ, XK, XL, XO, XP, XQ, XR, XS, XT, XU, XV, XW, XX, XY, XZ, YA, YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YO, YP, YQ, YR, YS, YT, YU, YV, YW, YX, YY, YZ, ZA, ZB, ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZL, ZO, ZP, ZQ, ZR, ZS, ZT, ZY, ZZ

**bulletin** **6**

#### OBITUARY NOTICE

We deeply regret to announce the sudden death of Mr M J A Carrington on Thursday 28 February. He was aged 42. Mick a PTO II, joined the Laboratory in February 1961 after serving in the Royal Navy from 1946. He had been a member of the Nuclear Physics Apparatus Group since its formation, and will be sadly missed by his many friends and colleagues. We extend our deepest sympathy to his wife and two children.

Mrs Carrington wishes to express her thanks for the help and sympathy extended to her in her recent bereavement and for the many floral tributes received from her husband's colleagues at the Laboratory.

#### PAPER ECONOMY

Paper supplies continue to be in very short supply and Her Majesty's Stationery Office has asked all Departments for a reduction of 50% of normal consumption. Converted paper items particularly envelopes are also seriously affected. Manufacturers of plain paper for Rank Xerox machines are already restricting deliveries to half normal consumption and copying should therefore be kept to an absolute minimum. All paper and card for printing is also very difficult to obtain.

The following hints and tips on paper saving are offered by HMSO:-

##### Ways of reducing paperwork

Reports confined within a single Department should as far as possible be brief notes of agreed action, summary of accepted recommendations etc. Factual historical background should be kept to the essential minimum. Argumentation for and against unresolved issues should never be recorded unless it is clear that it will bring about a decision.

Retyping letters, reports etc merely to improve style should stop. If the content is correct and clearly expressed it should be issued.

Where comments are brief, make them minimal and write them in manuscript.

Do not write what can be telephoned or dictate what can be shortly written.

Return wordy documents to their originator to be shortened (this may mean more typing immediately but it will save in the long run).

##### Distribution and storage

Use notice boards and accession lists to reduce distribution of circulars, office notices, house journals, etc.

Reconsider frequency of all regular publications.

Critically review all distribution lists. No spares should be allowed for.

Ensure paper, forms and envelope stocks are dust-and damp-free.

##### Typing procedures

Use both sides of the paper and single spacing.

Smaller type faces should be used more extensively.

Typists should not produce more copies than requested. Where a master is required for photocopying a copy is not necessary. (The original could be corrected softly in pencil).

Use A5 paper for short items (or preferably write them).

Manuscripts amendments to letters, minutes, reports etc are perfectly acceptable.

##### Miscellaneous

Retrieve and use for drafts, notes etc the reverse of any Xerox copies, circulars, etc which are blank.



## INTERNAL EVENTS

### NIMROD LECTURE SERIES

Monday 18 March  
11.30  
Lecture Theatre

$K^-p$  and  $pp$  Charge Exchange

*Dr D Websdale/CERN and Imperial College*

### HEP SEMINAR

Wednesday 20 March  
11.00  
Conference Room, Building R1

The Renormalisation Group

*J C Collins/Cambridge*

### SEMINAR IN COMPUTING

Friday 22 March  
11.00  
Conference Room, Building R2

A User's Experience of the GEC 4080

*D Maden*

This talk is about the GEC 4080 computer which is to be used to control the K17 experiment in Hall 3. The hardware of this computer includes many advanced features which facilitate the implementation of a multi-processing operating system. These features and the role of the computer within the K17 experiment will be discussed.

### NIMROD LECTURE SERIES

Monday 25 March  
11.30  
Lecture Theatre

Results from CERN ITEP Collaboration at Serpukhov

*Dr W Kienzle/CERN*

### TRADE DEMONSTRATION

Tuesday 26 March  
09.30 - 14.00  
East Wing Conference Room,  
Building R1

Hewlett-Packard Ltd will be demonstrating their new range of instruments including digital multimeters with some unique features.

### HEP SEMINAR

Wednesday 27 March  
11.00  
Conference Room, Building R1

Approach to Asymptopia in Electron-Positron Annihilation into Hadrons

*D K Choudhury/Oxford*

### NIMROD LECTURE SERIES

Monday 1 April  
11.30  
Lecture Theatre

Baryon Resonances below 2 GeV: Their Poles, Their Classification and Their Decays

*Dr R Cashmore/Oxford*



# EXTERNAL EVENTS

## OXFORD UNIVERSITY

ELEMENTARY PARTICLE PHYSICS SEMINAR/NP LAB - 1430 hours  
21 March: Antiproton-Proton Annihilation to  $\pi^+\pi^-$  and  $K^+K^-$  for Incident Momenta in the Range 0.7 to 2.4 GeV/c - Dr D P Jones/R.L.

## BRISTOL UNIVERSITY

PHYSICS AND GEOPHYSICS COLLOQUIUM - 1700 hours  
25 March: Physics and Physics Teaching in Chilli - Dr J A Eades/Bristol.

## READING UNIVERSITY

APPLIED PHYSICAL SCIENCES COLLOQUIUM - 1630 hours  
20 March: Design and Testing of Low Frequency Sound Absorbers - Mr N J Pittams.

## SOUTHAMPTON UNIVERSITY

THEORETICAL AND HIGH ENERGY PHYSICS SEMINAR - 1430 hours  
22 March: Four-Dimensional Field Theories Invariant under Supergauge Transformations - Dr J Illopoulos/CERN.

## ROYAL HOLLOWAY COLLEGE

HIGH ENERGY PHYSICS SEMINAR - 1500 hours  
19 March: Inclusive Results in  $K^+p$  Scattering at 14.3 GeV/c - Dr K Paler/R.L.

## INSTITUTE OF PHYSICS

JOINT MEETING WITH THAMES VALLEY PHYSICS CENTRE, READING UNIVERSITY - 1945 hours  
20 March: Energy and Materials Resources - Dr P Chapman/Open University.

## DARESBURY LABORATORY

DARESBURY LECTURE SERIES - 1400 hours  
26 March: Phenomenology of  $\pi^-p \rightarrow \pi^+n$  - A D Martin/Durham  
THEORETICAL PHYSICS SEMINAR - 1400 hours  
25 March: Size of Polarization in Inclusive Processes - Dr D Wray/UCL.

## EVENTS AT HARWELL

THEORETICAL PHYSICS SEMINAR/CONFERENCE ROOM, BUILDING 8.9 - 1400 hours  
19 March: Black Holes and Quantisation - Prof J G Taylor/King's College, London.  
NUCLEAR PHYSICS SEMINARS/CONFERENCE ROOM, HANGAR 8 - 1530 hours  
21 March: Gravitational Radiation - Prof W D Allen/R.L and Reading University.  
28 March: Radiocarbon Measurement and Dating - Mr R L O'let/N.P Division.

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## CHRISTIAN FELLOWSHIP (contd from page 4)

a time of fellowship. All are welcome to come along at 12.30 in the Conference Room, Building R12.  
Friday 29 March: 'One Lord, one faith, one baptism' - Ben Kingdom of Building R20, will be leading a Bible Study on Ephesians, Chapter 4, at 12.30 in Conference Room R12. All are welcome to come along.  
Advance Notice A colour film entitled 'Footprints in Stone' will be shown in the Lecture Theatre at 12.35 on 5 April.

## SEVEN-A-SIDE-SOCCER

The fixtures for the next 2 weeks are as follows:-

Tues.	19 March	C.A. v Rovers	Tues.	26 March	C.A. v R25
Thurs.	21 March	Apprentices v Nomads	Thurs.	28 March	R9 v RHG
Fri.	22 March	G.O. v Building R35	Fri.	29 March	Taylors v Apprentices

## 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 Berks  
Abingdon 1900 Ext 484



Encourage greater re-use of old envelopes and make full use of circulation folders and transit envelopes.

Wider use of compliment and acknowledgement slips in place of routine letters.

Make greater use of telecommunications, e.g.

Telephone discussion rather than letters/minutes

Requests for letters confirming telephone conversations should be declined

#### MISSING EQUIPMENT

The following item of equipment has been reported missing from Building R8:-

Industrial Blower      AERE No. 7706

Anyone with information on the present whereabouts of this item is asked to contact R Lascelles, Building R2, Ext. 6160/6222.

Inventory Section, Building R2 Ext. 570 are seeking information on the present whereabouts of a Diehl Electric Calculator, Type VSR 18, Serial No. 1254394.

#### FILM BADE NOTICE

It is Period 3. Colour Strip - PURPLE for 8y films. Please check that you are wearing the correct film and that all old ones are returned.

Next film issue, Monday 25 March.

#### CONFERENCE NOTICES

A Conference on 'Environmental Sensors and Applications'(Problems and Trends) is being jointly organised by the IERE in association with the IEE, Inst of Phys and the IEEE and will be held at the Royal Society on 18 and 19 November 1974. Further information including call for papers deadlines, subject matter etc from the Editor.

Information to hand on the 9th Finnish Summer School in Theoretical Physics (Subject - Advances in Particle Physics), 20-28 June 1974 including limited number of application forms. Contact Editor for further details.

#### OVERSEAS VISITS

Dr R S Orr, to CERN, 15 March - 5 April, for tests of liquid argon calorimeter.

Dr C M Fisher, to CERN, 17 - 20 March, to present case for Rapid Cycling facility to CERN T.C.C Working Party.

Dr L C W Hobbs, to ILL Grenoble, 21 - 22 March, to attend meeting of Scientific Council.

Dr R Madden, to Budapest, 24 - 27 March, to attend 1974 workshop on real time programming and to present paper on the  $\pi$ 9 operating system.

The Director to CERN, 25 March for one day, for discussions on National Accelerator Programme.

Mr E W Fitzharris to the USA, 27 March - 9 April, for discussions at A.N.L.

## SOCIAL NEWS

#### ATLAS & RUTHERFORD TABLE TENNIS TOURNAMENT

The club's singles and doubles handicap tournaments were held recently. Everyone had an enjoyable time and some close matches resulted. In the singles semi-finals, Eric Thomas managed to beat D P Roy in three games after giving him 15 points start in each game, while Bob Hopgood found it just too much in giving 14 points to Alan Pitchers; Bob however did win one game 21-15. In the final, Alan with 13 points start over Eric, won the first game 21-14 but Eric managed to chop his way to victory 23-21, 21-15. Partners for the doubles were drawn from a hat and the winning combination in an all-play-all competition, was Peter Smith and D P Roy.

#### CHESS TOURNAMENT 1973-74

Another fine tournament with some excellent games, the standard of chess seems to be improving each year.

For the second year running the final result produced a tie with Peter Hemmings sharing first place with - YES - Bill Turner. Congratulations to both players.

Final placings - Bill Turner and Peter Hemmings, 8 points. John Guy, Jim Riddle, Mike Elder and Mick James, all with 6 points and Peter Craske and Alan Maybury with 5½ points.

#### CHRISTIAN FELLOWSHIP

Friday 22 March: A Meeting will be held to discuss the forthcoming programme and to hold

*Social News cont. on page 3*