



Rutherford
Laboratory

5-12 June 1972
bulletin 20

R(12), NDT(60,3), ISW(3500), ANGLE(60), YINT(60), DUMMY(84),
(6,3), NACHT(48), XCEN(12), YCFN(12), NARS(12), TCEN(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(1,20), IODX(
DY(100,2), JDX(4), JDY(4), IHS(4), IOV(2), IUN(2), IOD(1), IDE
CF(16), IFS, NFS, FX, FY, JK, PTC, KPTC, NCOUNT, NBIN, MA, V, XUN
AXN, CTA, CTB, MX, MY, JA, JB, JC, JD, JE, JF, XF(20,3), YF(20,3)
MMON/CJACK/NSY(20,30), NMS(20), NDR(20), NDI(20), NLA(20), YA
(20), BX(20), NST1(20), NST2(20), INER(20), NSX(20,30), AWI(60)

RETIREMENT PRESENTATION



Mr A E Pyrah receiving a retirement present, contributed by his many friends and colleagues, from Professor W D Allen.

Ted Pyrah of the Superconducting Applications Group, retires on 12 June 1972. He served with the RAF from 1942 to 1947 and was wounded during a flight over Norway. The wounds gave him serious trouble during the after years. From 1947 to 1955 he worked on the 5 MeV Van-de-Graaf machine and, in 1955, was promoted to Chief Experimental Officer. From 1956 to 1960 he ably assisted in the construction of the Harwell Tandem Generator and also with the Oxford University Tandem Generator from 1960 to 1966. Since then and up to the present Ted has been working on cyclotron ion sources at the Rutherford Laboratory. We all join in wishing Ted a long and happy retirement in Cornwall.

TDI-A SATELLITE NEWS

We have recently received the disappointing news that the on-board tape recorders of the TDI-A Satellite have failed. The backup recorder failed on April 20 probably due to an electronic fault. The primary tape recorder was still working well at that time however and 90% of the data was being received. The final blow came in a message from ESTEC on 24 May which reported the mechanical failure of the remaining recorder observed during the evening pass at 1800 hrs on 23 May.

This means that data can only be received from the satellite during contact with a ground station. It is hoped to recover 16-18% of the data using ESRO ground stations and possibly up to 25% if NASA ground stations can be used.

The S2/68 experiment itself is still working but it's outstanding advantage of giving a complete sky scan with a single instrument has been lost. About one third of the sky had been mapped at the time of the failure (which affects all the experiments on board).

The latest news is that the electronic fault on the back-up recorder may be an electrical interference effect which could be relieved by operating the telemetry system in another way. Although this possibility is being investigated it is considered to be but a faint hope.

UNDELIVERED MAIL

A letter from CERN addressed to Mr S Lauper, Rutherford Laboratory quoting the EMR-CII Sampling System for Omega and SFM can be obtained from the Editor.

INTERNAL EVENTS

SEMINAR IN COMPUTING

Friday 2 June
11.00
Conference Room R12

The Operational Environment

H Hurst/RHEL

Problems and experience in Operations will be discussed, in particular with regard to the current problem of the ever expanding tape library.

RUTHERFORD LABORATORY STAFF MEETING

A Staff Meeting will be held in the Lecture Theatre on Monday 5 June at 3.00 p.m. The Director will address the meeting. (R L Circular No 15/72 refers).

NIMROD LECTURE SERIES

Monday 5 June
11.30
Lecture Theatre

Some Features of Inelastic $p\bar{p}$ Collisions

Professor K Hansen/Copenhagen

HEP DISCUSSION GROUP

Wednesday 7 June
11.00
Conference Room Building R1

Light Cone Approach to Structure Function in the Unified Theory of Weak and Electromagnetic Reactions

Dr Riazuddin/DNPL

NIMROD LECTURE SERIES

Monday 12 June
11.30
Lecture Theatre

Search for Magnetic Monopoles

Dr P Eberhard/CERN and Berkeley

NIMROD SCHEDULE

CYCLE 7 6 6 72 - 27 6 72

MACHINE PHYSICS

HIGH ENERGY PHYSICS

<u>Team</u>	<u>Beam</u>	<u>Experiment</u>	<u>State</u>
Birmingham University RHEL	K12A	$K^+\eta$ Elastic Scattering and $K^+\eta$ Charge Exchange from 0.45-0.95 GeV/c	Data
Cambridge University RHEL	K13C	Associated Production Cross Sections	Setting up
Imperial College Southampton University	π^+	Studies of η ω and A_2	Data
Surrey University Birmingham University RHEL	π^0	Total Cross-Sections for Pions on Light Nuclei	Data
RHEL/UCL/Berkeley/ Torino	K9	4 GeV/c π^+p interactions in track sensitive target	Data
Glasgow University RHEL	π^+N_4	Polarisation Measurements in π^+p Charge Exchange	Parasitic
Bristol University Southampton University RHEL	K15	K^+p and π^+p Differential Cross-Sections	Parasitic

EXTERNAL EVENTS

THE INSTITUTE OF PHYSICS MEETING

Friday 2 June
4.00
Bernard Sunley Lecture Theatre
The Royal Institution
21 Albermarle Street London

Spin Dependent Effects in Semi-conductors

Professor I Solomon/Director of Research CNRS

Tickets not required

PHYSICS AND GEOPHYSICS COLLOQUIUM

Monday 5 June
5.00
University of Bristol

Experiments and experience: a season of echo-sounding with the British Antarctic Survey

Dr M Walford University of Bristol

THEORETICAL PHYSICS SEMINAR

Monday 5 June
4.15
Queen Mary College

Laser-modulated Electrons

Dr T P Maclean/Malvern

NUCLEAR STRUCTURE SEMINAR

Monday 5 June
2.30
Nuclear Physics Laboratory
Oxford

Elastic and Inelastic Electron Scattering at the Kelvin Laboratory

Professor G R Bishop/Kelvin Laboratory

DARESBURY LECTURE SERIES

Tuesday 6 June
2.00
DNPL

Report on the Philadelphia Meeting

P Norton/DNPL

COMPUTING SCIENCE SEMINAR

Tuesday 6 June
2.00
Culham Laboratory

A New Approach to Job Control Languages

D W Barron/University of Southampton

THEORETICAL PHYSICS SEMINAR

Thursday 8 June
4.15
Clarendon Laboratory Oxford

K^- Mesic Atoms (review)

Dr J R Rook

ROYAL SOCIETY REVIEW LECTURE

Thursday 8 June
4.30
6 Carlton House Terrace
London

Application of Nuclear Magnetic Resonance to Biological Macro-molecules

A S V Burgen FRS

All interested in science are welcome at meetings, but those who wish to attend are asked to inform the Executive Secretary, The Royal Society, 6 Carlton House Terrace, London SW1Y 5AG.

RUTHERFORD LABORATORY BULLETIN

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Deadline
for
Insertions

GENERAL & SOCIAL NEWS

Tuesday 1600

INTERNAL & EXTERNAL EVENTS

Wednesday 1200

Room 40 Building R20
Rutherford Laboratory
Chilton Didcot Berks
Abingdon 1900 Ext 6114

OVERSEAS VISITS

Dr M R Jane to CERN 4 - 9 June, for discussions on Omega On-line Software and participate in first run. Mr M N King to CERN 5 - 7 June and Frankfurt 7 - 8 June. Messrs R W Barnard and D A Morris to CERN 6 - 13 June and C Maclean to CERN 6 June for setting up of Omega Project. Dr K Paler to Zakopane, Poland 7 - 25 June to attend the Twelfth Cracow School in Theoretical Physics and the Third International Colloquium on multiparticle Reactions. Professor W D Allen to USA 8 - 17 June.

FILM BADGE NOTICE

It is period 6, colourstrip YELLOW for 8y films and fast neutron packs. Please check you are wearing the correct dosimeters and that all old ones are returned. Period 7 will commence on Monday 12 June.

SOCIAL NEWS

CHRISTIAN FELLOWSHIP

All are welcome to attend a Bible Study on 2 Corinthians Chapter 8 led by D Ness-Wilson on Friday 9 June at 12.30 in R12 Conference Room.

THANKS

Amina Payne wishes to thank all the people she could not thank personally for contributing to her wonderful leaving presents.

SINGERS WANTED

Singers of all ranges are invited to join the Letcombe Singers. They rehearse on Tuesday evenings, summer and winter, in the new centrally heated hall at Letcombe Regis. The programme is varied and includes both sacred and secular music. No auditions. All that is required is an enthusiasm for choral singing. The singers are popular in this district and productivity is high. Last year they gave sixteen concerts and they are now rehearsing 'Showboat'. For further details please contact either B Silcock or Mrs S Harris Ext 254.

SEVEN-A-SIDE SOCCER

RUTHERFORD FOOTBALL

LEAGUE TABLE

26 MAY 1972

TEAMS	P	W	D	L	F	A	Pts
R 18	5	4	1	0	21	4	9
Transport	5	4	1	0	22	5	9
Atlas	6	2	2	2	9	15	6
Stores	5	2	1	2	14	14	5
Hall 3	5	1	2	2	8	13	4
R 9	5	1	1	3	8	23	3
D 0	4	0	2	2	5	8	2
R 25	5	0	2	3	8	13	2

FOLK CLUB

The Rutherford and Atlas Recreational Society Folk Club meets every Friday in R22 Coffee Lounge at 20.00 hours. Licensed Bar.

9 June Dunedain (Concertina, Mandolin, Recorder, Fifes and Tabor)
16 June Richard from Reading (Contemporary guitarist).