



COMMON/CSCAL/IBM, NERR, NRCNAP, ISCAN, NBR, NCR, NSCAN, NRO
IYSEL, IYSEU, IYMAX, NTRACK, CAN, NE, NMAIL, M, NTA
NBEGIN, NTK, NTRY, NMISS, NSSR, NFID, MAXMIM, NFIRST, NEND, JTR
COMMON/CFID/MFX(20,3), MFY(20,3), NFDX(10,3), NFX(20,3)
QTAB(2,20,3), NX(100,4), NY(100,4), XN(2), YN(8), IB(10,10)
IDY(100,2), JDX(4), JDY(4), IHS(4), ICV(2), IUN(2), IEL(2)
NCF(16), IFS, NFS, FX, FY, JK, PIC, KPIC, NCUINT, NBRIN, NXC
T, MAXN, CTA, CTB, MX, MY, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ
DIMENSION NCTR(144), NGTR(20), CTR(112), GK(12), MUDE(21)



diagram and rest of article, bottom of page 3.

INTERNAL EVENTS

NIMROD LECTURE SERIES

Monday 12 May
11.30
Lecture Theatre

Resonance Production at High Energies

Professor C Michael/Liverpool

HEP SEMINAR

Wednesday 14 May
11.00
Lecture Theatre

Chiral Confinement: An Exact Solution of the Massive Thirring Model

S D Ellis/NAL and DAMPT Cambridge

SPECIAL NIMROD LECTURE

Friday 16 May
11.30
Lecture Theatre

New Results on J Particle from Brookhaven

Professor Samuel C C Ting/MIT, DESY

NIMROD LECTURE SERIES

Monday 19 May
11.30
Lecture Theatre

Large P_T and the Quark Structure of the Nucleon

Dr P V Landshoff/DAMPT Cambridge

HEP SEMINAR

Tuesday 20 May
11.00
Lecture Theatre

Report on the Washington APS Meeting

A Clark/RL

HEP SEMINAR

Wednesday 21 May
11.00
Lecture Theatre

$\pi\pi$ Interactions in ψ' and A_1 Decays

D Morgan/RL

SEMINAR IN COMPUTING

Friday 23 May
11.00
Conference Room, R61

A Review of the UMRCC 1906A/7600 Joint System

D Haworth/UMRCC

The University of Manchester Regional Computer Centre (UMRCC) provides a rapid general purposes computer service for the University of Manchester, UMIST, and Universities in the North West, Yorkshire, the Midlands and Wales. The centre provides a comprehensive service which covers most of the computing carried out at the Manchester campuses (ie staff and research students work, and student teaching). It also provides a powerful computing facility for remote Universities to back and supplement their own local and less powerful computer equipment.

The talk will detail how the "joint system" provides this service together with information on the network of RJE terminals and consoles, and facts and figures on overall workload and performance.

RUTHERFORD LABORATORY NOTICES AND CIRCULARS

In future, the Bulletin will publish in each issue, a list of RLN's and RLC's issued during the previous fortnight, and readers, if not on the circulation list for either of these should consult the copies displayed on notice boards. RLC's with a short text will be published in full; details of other RLC's and all RLN's will be confined to numbers and titles. However, there are bound to be exceptions and in fact we start this new service with such an example shown below.

NON-INDUSTRIAL SHIFT TRANSPORT

RLN No. 19/74 Amendment No. 1. This deals with an amendment to the timetable for Route 2 and the notice should now have been published. As this comes into effect on Monday 12 May users of this route are advised to read the notice immediately.

FILM BADGE NOTICE

It is Period 5. Colour Strip - RED for 8y films. Please make sure you are wearing the correct dosimeter and that all old ones are returned.

Next film issue - Monday 19 May.

4000 XEROX

The 4000 Xerox in the Library is being used beyond its recommended working efficiency level and is breaking down too frequently. It is intended primarily for the convenience of Library users wishing to copy extracts from books or journals and for people needing to use the back-up facility (particularly now where this will save weight for postage purposes).

It would be appreciated if people needing copying which does not come into these categories will whenever possible use the 3600 or 660 Xerox machines on the top floor of R1 or the 1000 Xerox machine in R25 Room 2.35. Other 1000 Xerox machines are situated in R2, R12, R20 and R25.

PERIODICAL SAFETY TEST OF PORTABLE ELECTRICAL

The test carried out during March/April 1975 has now been completed. The current marker colour is YELLOW and marked "Do not use after JULY 1975".

Portable electrical equipment marked otherwise, or has no marker should be considered unsafe and MUST NOT BE USED. All such items should, if possible, be returned to Electrical Services Section, Building R18. Alternatively ring A Hipwell, Ext. 573.

EXTERNAL EVENTS

NUCLEAR PHYSICS SEMINARS, NP DEPT, OXFORD - 14.30 hrs

- 12 May: Prof F Calaprice/Princeton & Oxford - Weak Magnetism and Second Class currents in β Decay.
 19 May: Prof Sir Ernest Titterton/Australian Nat. Univ. Nuclear Physics at A.N.L. Canberra.
 26 May: Dr J D Larson/Consultant, ORNL - Beam Optics and Other Features of the ORNL Folded Tandem.

THEORETICAL PHYSICS SEMINARS, CLARENDON LAB - 16.15 hrs

- 15 May: Dr A J R Prentice - Origin of the Solar System.
 22 May: Prof E W Montroll/U. of Rochester - Theory of Unusual Electrical Transport Properties in Amorphous Materials (14.30 in Townsend L.Th.)

ELEMT. PART. PHYS. SEMINAR, NP DEPT, OXFORD - 14.30 hrs

- 22 May: Prof C Rubbia/Harvard & CERN - Search for New Particle Production by Neutrinos.

LOW TEMP. & SOLID STATE PHYSICS SEMINAR, CLARENDON LAB -

- 15 May: 14.30 hrs Prof H Kamimura/Tokyo, Cambridge - The Metal Insulator Transition.

COLLOQUIA CLARENDON LAB, OXFORD - 14.15 hrs

- 16 May: Dr H Lamberton/SERL, Baldock - High Power Gas Lasers.

CHERWELL-SIMON LECTURE - UNIV MUSEUM L.Th. OXFORD

- 23 May at 16.30 hrs: Prof E W Montroll/U. of Rochester - Some Quantitative Aspects of Social Phenomena.

NP GROUP SEMINAR, KING'S COLLEGE, LONDON - 14.00 hrs

- 21 May: Dr A R Barnett/Manchester - Coulombic Nuclear Interference Calculations with α & O Projectiles.

THEORETICAL PHYSICS SEMINARS, QMC - 16.15 hrs

- 12 May: Dr A M Lane/Harwell - Some Interesting Problems in Present Day Nuclear Physics.
 19 May: Prof S F Edwards/SRC - The Theory of Spin Glasses.

THEORETICAL & HEP SEMINARS, SOUTHAMPTON - 14.30 hrs

- 16 May: Dr J Goldstone/DAMTP, Cambridge - Quantization of Non-Linear Waves.
 23 May: Dr R K P Zia/Soton - The Potts Model - A Phase Transition Laboratory.

DARESBURY LECTURE SERIES - 14.00 hrs

- 13 May: P G H Sandars/Oxford - Weak Neutral Currents and Possible Parity Violating Effects in Atoms.
 20 May: C J S Damerell/R.L. - A Study of the Hypercharge Exchange Reactions $\pi^+p \rightarrow K^+\Sigma^+$ and $K^-p \rightarrow \pi^-\Sigma^+$ at 10 GeV/c.

THEORETICAL PHYSICS SEMINAR, DAESBURY LAB - 14.00 hrs

- 12 May: L M Jones/Cambridge - On the Parity of Regge Cuts.

NUCLEAR THEORY SEMINAR, DAESBURH LAB - 14.00 hrs

- 19 May: R C Johnson/Surrey - The Deuteron Nucleus Interaction.

HEP SEMINARS, CAMBRIDGE UNIV. - 15.00 hrs

- 15 May: Dr R Delbourgo/Imp. Coll. - Supersymmetry and Bound States.
 22 May: Prof G Feldman/Imp. College - A Case for Colour.

THEORETICAL PHYSICS SEMINAR, MANCHESTER UNIV. - 14.30 hrs

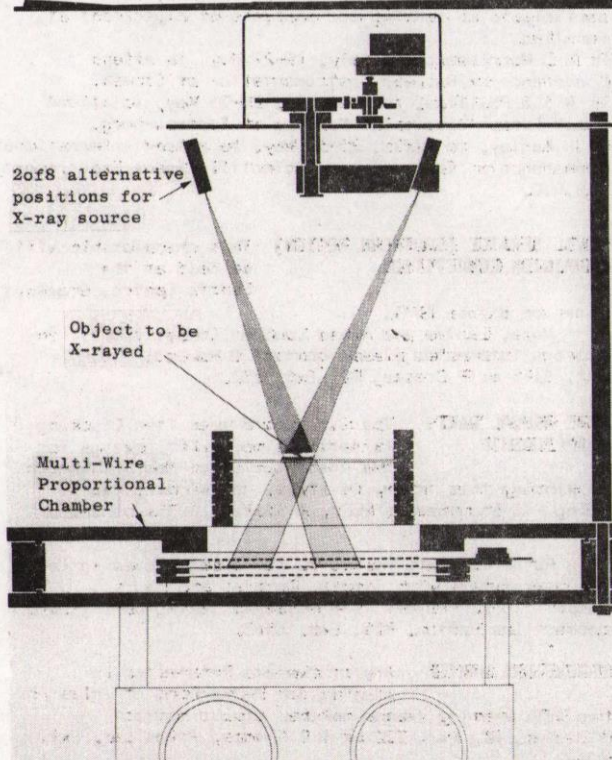
- 21 May: Dr A M Lane/Harwell - Fast Neutron Capture by Nuclei.

APP. MATHS. SEMINARS, ROYAL HOLLOWAY COLLEGE - 15.00 hrs

- 15 May: Prof F S Levin/Brown U. & Surrey - Low Energy $e^- + H$ Scattering: Application of a New Theory of Many - Body Scattering.
 16 May: Dr Vo Ky Lan/Paris - Low Energy Electron Scattering of C, N and O (details from Editor)

THEOR. PHYS. SEMINAR, AERE, CONF. RM H8.9 - 14.00 hrs.

- 13 May: Prof J Beeby/Leicester - Quantum Mechanical Scattering of Atoms from Surfaces.



The completed exhibit was the result of the co-ordinated efforts of several groups i.e. The Radiological Research Group who have been engaged on the medical applications; the HEP Electronics Group who provided the computer and electronics; the Nuclear Physics Apparatus Group for the engineering aspect and the Scientific Administration Group who liaised with the graphics and stand design.

It is an honour for the Laboratory to be invited to exhibit at a Royal Society Soiree as only about twenty-five exhibits are carefully chosen for demonstration to the Fellows and their invited guests. The soirees are attended by several hundred people. Arrangements will be made for staff to see the exhibit prior to it going to the Festival Hall on 11 June for the joint IEE/I.Mech.E. Conversazione.

One of the main objects of the Society from its inception was the performance of experiments before the members and although the experimental method is no longer directly employed, selected demonstrations are still given at the Society's yearly soirees.

The Royal Society has been in existence for 315 years and is the oldest scientific society in Great Britain and one of the oldest in Europe. It was founded in 1660 although a nucleus had been in existence for some years. In 1645 weekly meetings were held in London of "divers worthy persons, inquisitive into natural philosophy", and from 1648 in Oxford where philosophers formed an association under the title of the Philosophical Society of Oxford. A close link was maintained between the two groups and ultimately the activities of the two societies were concentrated in the London meetings. By late 1660 the King (Charles II) had approved the design of the meetings and in 1662 the Royal Society was incorporated by a Royal Charter.

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



In Bulletin No 8 we published a picture of a hen blackbird nesting in the east entrance to Building R1. We can now show you the happy ending to this story. The photo, showing 'Father' BLACKBIRD doing his duty, is a brilliant piece of wild life photography by Reg Jones of the Photographic Services section.

CIVIL SERVICE BENEVOLENT FUND 'GIVE A HOME' APPEAL

The collection at the Atlas and Rutherford Laboratories for the 'Give

a Home' appeal, raised £27. The organisers wish to express their thanks to those who helped with the collection and to those who contributed.

NETBALL - GIRLS WANTED

Netball players urgently required. The SRC Sports Day is approaching rapidly. For further details please contact Mrs P Coulthard, R1, Ext. 6622.

CHRISTIAN FELLOWSHIP

Friday 16 May Perhaps one of the least read books of the Bible is the Book of Revelation. In this prophetic account of the last times is recorded the earth's final conflict at Armageddon, the destruction of evil and the ultimate and everlasting reign of Jesus Christ. Why not spend a few minutes this lunchtime in reading from the opening chapters of this formidable yet exciting book. Meet with us at 12.30 in the R12 Conference Room.

Friday 23 May Frank Smith of Accounts Section will be leading the second talk and discussion on the Social Benefits of Evangelical Outreach in the 19th century. The first outlined the reasons for the poverty and wretchedness of millions of folk in the cities. What were the results of Christian action amongst the prisoners, prostitutes, and the sick? Do any of the societies founded in the last century exist today? All are invited to come along at 12.30 to the R12 Conference Room.

To Mr H F Norris, Editor of the RL Bulletin, Rutherford Laboratory, Chilton, Didcot, Oxon, OX11 0QX
I wish to continue receiving copies of the Bulletin. Please put me on your revised mailing list:

Name.....

Postal Address.....

BULLETIN NOTICE - EXTERNAL READERS

From time to time we would like to review our distribution list for readers outside of the Science Research Council. Peoples interests change and there may be a number of names on our list of external readers who at one time had reason to receive the Bulletin but who are now no longer interested. "In order to continue to receive the Bulletin, please complete the form at the bottom of page 4 and return to the Editor as soon as possible".

HELICOFLEX SEALS - FURTHER MEETING

As stated at the recently held seminar by Dowty Seals Ltd, a further (smaller) meeting has now been arranged. This will be held in the R12 Conference Room on Tuesday, 13 May from 9.15 - 10.45. A French expert, Monsieur C Abbes will be present to answer technical questions. Attendance is by invitation only and anyone who expressed a wish to meet M. Abbes and who has not been contacted by mid-day Monday, 12 May, should get in touch with the Editor on Ext. 484.

OVERSEAS VISITS

Mr W Turner, to CERN, 11-14 May, to attend meetings of the Rapid Cycling Bubble Chamber project at CERN.
Professor N Lipman and Dr P Litchfield, to CERN, 12-14 and 12-13 May respectively, to attend Omega White Book Meeting.
Dr G Manning, to Saclay, 13-15 May, to lecture at the College de France and Saclay, on EPIC.
Dr G E Kalmus, to CERN, 13-16 May, to attend T C Bureau, TCC and K_L collaboration meeting.
Dr G V Guy, to CERN, 14-20 May, to attend TCC and to work on experiment.
Drs J K Davies, R D Baker and K Sumprok, to the USSR, 14-28 May to attend the 1975 JINR-CERN School of Physics at Alashta, Crimea.
Mr G M McPherson, to Italy, 17-27 May, to attend and present paper at the 2nd ISPRANuclear Electronics Symposium.
Dr R M Brown, to the USA, 18 May - 6 June, to participate in running and analysis of experiment at Fermilab.
Mr M C Morrissey, to Italy, 19-27 May, to attend Conference on Nuclear Instrumentation at Stresa.
Dr R J N Phillips, to Freiburg, 20-25 May, to attend Black Forest Discussion Meeting at Todtnau-berg.
Mr H Hadley, to Paris, 25-31 May, to attend International Conference on Technology of Scientific Space Experiments, E.S.R.O.

CIVIL SERVICE (SOUTHERN REGION) BADMINTON COMPETITION

This championship will be held at the Sports Centre, Bracknell Berks on 8 June 1975.

Mens, Ladies and Mixed Doubles Competitions: any players interested please contact G Howard, R18, Ext. 6115 or P Craske, R2, Ext. 232.

AERE ANNUAL DARTS CHAMPIONSHIP

The Rutherford team (the Chucking Farmers) gained swift revenge for the inadequacies of the CHESS team by winning this trophy in style, the winning team being - S Stoneham, J Moir, A Slater, J Sisson and F Cooke.

Rutherford are hoping to run a darts evening in the near future with Single, Doubles and Fours Competitions. Players interested in taking part should contact Les Patton, R18, Ext. 6115.

CRICKETERS WANTED

Any cricketers interested in playing for Rutherford or Atlas in the AERE evening league matches should contact P Craske, R2, Ext. 232 or R E Thomas, Atlas Lab, Ext. 6219.