



Rutherford
Laboratory

3-17 December 1973

bulletin 36

SRC BURSARIES FOR FULL-TIME STUDY AND SANDWICH COURSES

Attention is drawn to SRC Training Notice 6/73 which invites applications from staff of the Council for Awards to enable them to undertake full-time study or sandwich courses at a University, Polytechnic, etc, commencing in 1974. The nominal closing date for applications is 12 February 1974 but it should be noted that there is a provision for late applications in exceptional cases. Possible late applicants should inform the Training Officer as soon as possible, even if they may eventually withdraw. Further information and application forms from T F Gubbins, Building R20, Ext 266.

POPPY APPEAL

The total collected this year at Rutherford Laboratory was £44.11½ which is £6.88 more than last year. Congratulations and thanks have been received and are passed on to all those who gave and to those who collected.

FILM BADGE NOTICE

Period 13 commences Monday 13 December. Colour strips RED for 8y films. There will be no issue of neutron packs due to the Nimrod shutdown. Anyone working with neutron sources please contact Mrs Coates, Ext 430. Please ensure all old dosimeters are returned. Six monthly TLD change for surnames commencing with W, X, Y, Z.

UNDELIVERED MAIL

Correspondence, held by the Editor, has been received from Cebécor, Centre Belge D'étude De La Corrosion concerning the English version of the "Atlas of Electrochemical Equilibria in Aqueous Solutions". Also pamphlets on Tuthill Pumps and Connectors.

MISSING EQUIPMENT

An electric kettle, AERE no 22364, has disappeared from Laboratory 7, R1. Anyone knowing the whereabouts of this item please inform J Hutton, R1, Ext 6113.

PAPER SHORTAGE

There is an increasing national shortage of paper which is making itself felt in the long delivery times now quoted. Paper mills are quoting a delivery time of about 28 weeks which is having repercussions throughout the industry. In particular the paper used for litho printing in the Laboratory is being delivered in extremely small quantities and is barely sufficient for regular output. All staff are asked to economise in the use of paper and in their demands for printing or copying. Where timing allows the Bulletin should be used instead of the "office and lab" circulation for information of short term interest. White printed envelopes are for mail leaving the Laboratory and are not intended for internal mail. Circulation envelopes or, if sealing is required, small manilla envelopes should be used.

INVENTORY NOTICE

Will the persons now having the following Tektronix plug-in units on their inventories contact F R Jacob, Ext 6255 who will be pleased to hand over the Instruction Manuals for them:-

Type CA Serial No 101083
Type L Serial No 101224
Type G Serial No 100331

NIMROD SHUTDOWN

Nimrod will be shutdown from 1 December until about mid-April 1974 for maintenance, modification and civil engineering work for the magnet and 70 MeV injector tunnel.

INTERNAL EVENTS

NIMROD LECTURE SERIES

Monday 3 December
11.30
Lecture Theatre

"Dynamics and Non-symmetries of Recent Results in $N^* \rightarrow N\gamma$, $N\rho$, $\Delta\pi$ Decays"

Professor R G Moorhouse (University of Glasgow)

FILMS

Tuesday 4 December
&
Wednesday 5 December
at 13.15
Lecture Theatre

"T-Max for Progress and T-Max Applications in UK"

These two films both of 15 minutes duration, should be of particular interest to workshop staff.

HEP SEMINAR

Wednesday 5 December
11.00
Conference Room, R1

"Phenomenological Investigations of the Pomeron in pp Scattering"

Dr P D B Collins (Durham)

Fits to pp data, for s between 10 and 3000 GeV², using various models of the Pomeron pole and associated cuts are discussed. The best fit is given by a pole with trajectory intercept above 1, but with no cuts; the dip at $t = -1.4$ GeV² stems instead from a non-shrinking "core" term.

SIGNETICS & MOTOROLA SEMINAR

Wednesday 5 December
10.00 - 16.30
Lecture Theatre

Lectures will be given by specialists from Signetics and Motorola on advanced technologies relating to Linear circuits, memories and C-Mos.

SEMINARS IN COMPUTING

Friday 7 December
09.30
Conference Room, R12

"Models for Rapid Momentum Fitting"

Dr M J O'Connell (Rutherford Laboratory)

A two-part review of mathematical methods for determining the momenta of particles crossing track chambers will be given. The talks begin at 09.30 and 11.00 respectively.

Topics to be covered include:-

- (a) Tchebyshev models where the detectors are mainly outside the analysing field, as in "Hadron Detector experiment at the Daresbury Laboratory".
- (b) Iterative curved fitting, with constraints derived from field information, as in the LAMP2 experiment at the Daresbury Laboratory.
- (c) Cubic spline fits for curvature, as in the Split Field Magnet experiment at the ISR.
- (d) Polynomial expansions for momentum, as functions of the "principal components" or "significant variables" derived from space co-ordinates.

NIMROD LECTURE SERIES

Monday 10 December
11.30
Lecture Theatre

"A measurement of the Charge Asymmetry in the Decays $\eta \rightarrow \pi^+\pi^-\pi^0$ and $\eta \rightarrow \pi^+\pi^-\gamma$ "

Dr M R Jane (Rutherford Laboratory)

ATLAS COMPUTER SEMINAR

Wednesday 12 December
11.00 & 14.00
Atlas Computer Laboratory

11.00 - Computer Animation - some new Antics by Alan Kitching, Grove Park Studio.

14.00 - Design Awareness by Colin Emmett, Royal College of Art.

There is a limited seating capacity of 60. If you wish to attend please contact Mrs C Davis, Abingdon 1991, Ext 6103.

EXTERNAL EVENTS

THEORETICAL PHYSICS SEMINAR

Monday 3 December
16.15
Queen Mary College

"Two dimensional plasmas"

Prof. S F Edwards/SRC

DARESBUURY LECTURE SERIES

Tuesday 4 December
14.00
Daresbury Laboratory

"Evidence of a New Heavy Particle"

Dr E W Kellerman/Leeds University

THEORETICAL PHYSICS DIVISION SEMINAR

Tuesday 4 December
14.00
Conference Room, Building 8.9
AERE

"Tunneling Ferroelectrics"

Dr R Stinchcomb/Oxford University

HIGH ENERGY PHYSICS SEMINAR

Wednesday 5 December
15.00
Royal Holloway College

"Hadron Spectroscopy"

Prof I Butterworth/Imperial College

THEORETICAL PHYSICS SEMINAR

Thursday 6 December
16.15
Clarendon Laboratory, Oxford

"Recent Results on Critical Phenomena in Two Dimensions"

Dr D B Abraham/Dept of Theoretical Chemistry

ELEMENTARY PARTICLE THEORY SEMINAR

Friday 7 December
14.20
Nuclear Physics Laboratory,
Oxford

"Dual Model Approach to Diffraction Scattering"

Dr J E Paton/Oxford

THEORETICAL PHYSICS SEMINAR

Monday 10 December
16.15
Queen Mary College

"Ultraviolet Behaviour of Gauge Theories"

Dr G G Ross/Rutherford Laboratory

DARESBUURY LECTURE SERIES

Tuesday 11 December
14.00
Daresbury Laboratory

"The Strange Axial Vector Mesons"

Dr J Dainton/Daresbury

RUTHERFORD LABORATORY BULLETIN

Published by the Scientific Administration Group

Acting Editor: F HARDEN

Deadline
for
Insertions

GENERAL & SOCIAL NEWS
Tuesday 1600

INTERNAL & EXTERNAL EVENTS
Wednesday 1200

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Rutherford Laboratory
Chilton Didcot Berks
Abingdon 1900 Ext 6114

SOCIAL NEWS

BAIT FOR BOOKWORMS

The Library has some more old and superseded books for disposal. Please help yourself from the table in the Reading Room, R20.

CHRISTIAN FELLOWSHIP

Friday 7 December - A fascinating colour film entitled the "City of Bees" will be shown in the Lecture Theatre at 12.35 pm (43 minutes running time). This film shows in detail the life of the honey bee comparing it with our own modern civilization. All are warmly invited to see this film.

Friday 14 December - All are welcome to join in a time of prayer at 12.30 pm in the R12 Conference Room.

Tuesday 18 December - Rutherford Laboratory Carol Service at 12.40 pm in the Lecture Theatre led by the Rev David Price of Christchurch, Abingdon.

MESSAGES OF THANKS

Audrey Robertson wishes to thank all for the lovely presents received on 16 November on her resignation.

As usual the latest dance in the Rutherford Laboratory Restaurant was a huge success, thanks to the efforts of Peter Craske, Terry Batchellier and their band of helpers. Everyone who goes to these dances would like to express their appreciation to all who make these wonderful evenings possible.

TABLE TENNIS

Division II - AERE E lost to Atlas A 4-6
Atlas A beat Howbery A 7-3
MG B beat Atlas A 6-4

Division III - Atlas B lost to Civil Service A 1-9

Division IV - Atlas C lost to Letcombe C 3-7
Atlas C lost to BRSA K 4-6

Atlas A's run of wins was ended by MG who won a very closely fought match by winning the third game of the doubles. The other two teams can take heart in the fact that their handicap should be good, even though Atlas C have been drawn against the current Division I leaders.