

22 October - 5 November 19

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RUTHERFORD LABORATORY LECTURE The next lecture in this series will be held at $3.15~\mathrm{pm}$ on Thursday I November in the Rutherford Laboratory Lecture Theatre.

 $\mbox{\rm Dr}$ J A Saxton CBE, Director of the Radio and Space Research Station, will give a talk entitled

THE WORK OF THE RADIO AND SPACE RESEARCH STATION

Summary

The major role of the RSRS is the management and technical support of the space science programme of the SRC. The programme, which makes use of satellites, rockets and balloons is predominantly carried out by Universities, but the station also has its own in-house space research in geophysics and astrophysics. In addition the RSRS conducts studies of radio meteorology and the propagation of centimetre, millimetre and sub-millimetre radio waves. There is also a small programme of radio astronomy.

For your diary: The next talk will be on Thursday 29 November, when Prof E R Laithwaite will give a talk entitled "Three Dimensional Engineering".

OVERSEAS VISITS

Mr D C Salter to ILL, Grenoble, 22-26 October, for discussions with ILL staff on scheduling, new UK proposals, ancillary apparatus, etc.

Messrs R W Morgan and C A Page to CERN, 21-23 October, to liaise with Dr Astbury on problems associated with return of \bar{p} - p experimental equipment.

Mr D A Gray to Tokyo, 2-11 November, to attend US-Japan Seminar on High Energy Accelerator Science Tokyo 5-9 November 1973.

FILM BADGE NOTICE

It is Period II. Colour Strip ORANGE for $\beta\gamma$ films and neutron packs. Please check that you are wearing the correct dosimeters and that old ones are returned.

MISSING EQUIPMENT

Digital Voltmeter, type 2025, Serial no 13502 missing from a rack in Experimental Hall 3. Anyone knowing the whereabouts of this item please contact D Culliford, ext 6195 or C H Booth, ext 6645, or D Bath, ext 6363.

MESSAGE OF THANKS

Mr B P Keen would like to thank everyone for their kindness and sympathy at a time when it was most appreciated.

STORES NOTICE

As from 15 October 1973 enquiries and orders for Gas requirements and deliveries should now be directed to Building R24, ext 6141.

INTERNAL EVENTS

NIMROD LECTURE SERIES Monday 22 October !130 Lecture Theatre, R22

HEP SEMINAR
Wednesday 24 October
1100
RI Conference Room

SEMINAR IN COMPUTING Friday 26 October 1100 R12 Conference Room

APPLIED PHYSICS LECTURE Monday 29 October 1500 Lecture Theatre, R22

NIMROD LECTURE SERIES Monday 29 October 1130 Lecture Theatre R22

HEP SEMINAR Wednesday 3! October 1100 R! Conference Room

TALK ON ELECTRON BEAM WELDING Wednesday 3! October 1515 Lecture Theatre R22

NIMROD LECTURE SERIES Monday 5 November ||30 |Lecture Theatre R22 "Searches for Superheavy Elements: an "Elementary Review"

Dr C J Batty (RHEL)

"New v results from Gargamelle"

W A Venus (RHEL)

"Automatic Program Library Management"

A E Stormer (RHEL)

An automatic scheme (known as "auto-clean-up") for management of program libraries is in operation at the Rutherford Laboratory. It is currently being extended to archive obsolete modules onto tape. The reasons for the scheme and a description of its operation are presented. This seminar is based on a paper presented recently at the SEAS conference.

"Track Sensitive Targets and Bubble Chamber Physics"

Dr P R Williams and Dr C M Fisher (RHEL)

Following the successful developments of the track sensitive targets in the 1.5m Bubble Chamber at the Rutherford Laboratory, plans have been made to incorporate them in the very large bubble chambers in Europe and the USA. The principles of operation of TSTs and the particle physicists interest in these devices will be presented.

"Hadronic Processes at Large PT"

Prof J C Polkinghorne (Univ of Cambridge)

"S Matrix Theory of Massless Particles"

M Pennington (RHEL)

"Designing for Electron Beam Welding"

F J Becket (Electron Beam Processes Ltd)

A brief description is given of the basic principles of the process and the facilities provided.

"KOp Interactions between 0.8-3.0 GeV/c"

Prof G Alexander (Tel Aviv & CERN)

NIMROD SCHEDULE - see page 4

EXTERNAL EVENTS

THEORETICAL PHYSICS SEMINARS onday 22 October 615

Queen Mary College, London

"Currents and Fields in the Thirring Model"

Prof R F Streater (Bedford College)

THEORETICAL PHYSICS DIVISION SEMINAR

Tuesday 23 October 1400 Conference Room Building 8.9 AERE

"Calculation of Stresses in Fast Reactor Fuel Elements"

Dr D Wilmore (AERE)

HIGH ENERGY PHYSICS SEMINAR

Wednesday 24 October 1500 Royal Holloway College "Dimensional Regularization"

Dr R Delbourgo (Imperial College)

THEORETICAL PHYSICS SEMINAR Thursday 25 October

1615 Clarendon Laboratory, Oxford "Quantum Theory of the Diffusion of Light Interstitials in Metals"

Dr A M Stoneham, (AERE)

NUCLEAR PHYSICS DIVISION COLLOQUIUM

Thursday 25 October 1530 Conference Room, H8 AERE "The TRIUMF Facility for Radiobiology and Radiation Therapy using Negative Pions"

Dr D Lobb (RHEL)

THEORETICAL PHYSICS SEMINAR

Monday 29 October 1545 Queen Mary College, London "Phase Transitions and Correlation Functions"

Prof O Penrose (Open Univ)

THEORETICAL PHYSICS DIVISION SEMINAR

Tuesday 30 October 1400 Conference Room Building 8.9

AERE

"Non-linearity and the Simulation of Extended Defects"

Dr J Sinclair (AERE)

HIGH ENERGY PHYSICS SEMINAR Wednesday 31 October 1500

"Diffractive Processes"

Royal Holloway College

Dr P V Landshoff (DAMPT, Cambridge)

ELEMENTARY PARTICLE PHYSICS SEMINAR

Thursday | November 1430 Nuclear Phys Laboratory, Oxford

"Recent Developments in Neutrino Physics"

Dr G Myatt

FUTURE EVENT

Low Temperature Technology Exhibition and Conference at Brighton, 13-15 November 1973 (details from Editor).

RUTHERFORD LABORATORY BULLETIN

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Acting Editor: F HARDEN Room 40 Building R20

Deadline for Insertions GENERAL & SOCIAL NEWS

INTERNAL & EXTERNAL EVENTS

Rutherford Laboratory Chilton Didcot Berks Abingdon 1900 Ext 6114

Tuesday 1600

Wednesday 1200

SOCIAL NEWS

CHRISTIAN FELLOWSHIP

Friday 26 October - 'The Lord is My Shepherd'. Frank Smith of Building R20 will be leading a Bible Study on the subject 'Christ in the Book of Psalms'. All are welcome to come along and the meeting commences at 12.30 pm in the R12 Conference Room.

Friday 2 November - All are welcome to join in a time of prayer led by Dr Jim Sinclair of AERE. The meeting commences at 12.30 pm and is held in the RI2 Conference Room.

THE HORTICULTURAL SOCIETY

Miss G Hodgman will give a talk, accompanied by slides, on "Photography in the Garden" 1930 to 2130 hours on Monday 29 October 1973 in the Lecture Theatre, Building R22. Tickets, including refreshments, at 15p are available from Committee Members, Mr R S Brabben and Mrs V E Goodwin.

FOUND

One man's sweater was found after the last Folk Club meeting. Owner please contact Ann Bishop, ext 248.

NIMROD SCHEDULES

CYCLE 11 and 12 22 10 73 - 20 11 73		MACHINE PHYSICS	HIGH ENERGY PHYSICS	
<u>Team</u>	Beam	Experiment		State
UCL/BRUSSELS	K19	HBC/TST K p Studies		Data
RHEL	π11	Beam Studies & Irradiation		Data
BIRMINGHAM/SURREY/RHEL	K17	Stopping Kaons		Setting up
CERN/ORSAY/OXFORD	P81	Hadron-Proton Spin		Installation
OXFORD	P71	Chamber Tests		Installation
COUNTER GROUP B/ CAMBRIDGE UNIVERSITY	π12	$\pi^- p \rightarrow K^0 \Lambda^0$ in the range 1.4 - 2.0 GeV/c		Beam Tuning
IMPERIAL COLLEGE/RHEL	π8	Experiments on Narrow Bosons. x^{O} (958), S* and Cross-Section Measurements		Installation
BRISTOL/RHEL	K15	π^+ -p Differential Cross-Sections		Data