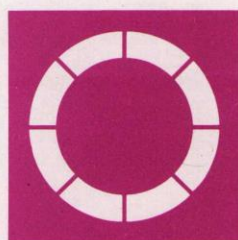


No.5/67
6 Feb 67



Rutherford Laboratory

Bulletin

General News

VISITORS. Twenty-five engineers attending the "Physics for Engineers" course at AERE Harwell will visit the Laboratory on Monday, 6 February.

Forty members of the King's College Maxwell Physical Society will visit the Laboratory on Wednesday, 8 February.

RADIATION PROTECTION NOTICE. Due to the NIMROD shutdown fast neutron films were not issued to NIMROD personnel for Period 2. Possibly due to this a number of films issued on 28 December have not been returned. Would personnel still holding these films return them as soon as possible to Miss J. Towers, Bldg R.20. The next issue of fast neutron films will be on 20 Feb.

P.L.A. NEWS. The intensity of beams from the P.L.A. has recently been increased to 5 μ amp mean unpolarized and 1.3×10^9 protons/sec at a polarization of 50%.

A G.G.T. valve has recently been successfully tested at 6 R/F duty cycle up to 766 kW peak power. This power level would be sufficient for the operation of the P.L.A. at a 5% beam duty cycle. Ageing of the valve up to this power was no more difficult or prolonged than the normal ageing-up process of the G.G.T.'s at 2% duty cycle.

OVERSEAS VISIT. Dr. L.C.W. Hobbs, to CERN, 5-7 Feb, to attend a meeting of ECFA, working group 2.

Machine Schedules

P.L.A.

Date	Team	Experiment
6-7 Feb	Oxford U.	Studies of (p,t) Reactions on Mg^{25} and Si^{28}
8-13 Feb	Queen's Univ. Belfast & Westfield Coll.	B^{10} Pick-up Reactions

Internal Events

Mon, 6 Feb, 11.15 a.m. Lecture Theatre	Nimrod Lecture Series	Dr. J.V. Jelley (A.E.R.E.)	Radio Pulses from Cosmic Ray Showers in the Atmosphere.
Mon, 13 Feb, 11.15 a.m. Lecture Theatre	Nimrod Lecture Series	Dr. G. Moorhouse (Glasgow Univ.)	Photo-production of Baryon Resonances and Symmetries.
Wed, 8 Feb, 11.00 a.m. Conf. Rm, R.1.	HEP Discussion Group	(a) "Electromagnetic Mass Differences" by Dr. R.G. Moorhouse (Glasgow U.) (b) "Remarks on Partially Conserved Tensor Currents" by Dr. G. Costa (R.H.E.L.)	

External Events

Mon, 6 Feb, 4.15 p.m. Queen Mary College	Theor. Phys. Seminar	Prof. S.F. Edwards (Manchester)	Topological Problems in Statistical Mechanics
Mon, 6 Feb, 4.45 p.m. Univ. of Bristol	Colloq.	Mr. D.F. Gibbs	Space Charge Limited Currents
Mon, 6 Feb, 5 p.m. Univ. of Reading	Colloq.	Dr. G.D. Watkins (G.E. Schenectady)	An E.P.R. Study of Point Defects in Irradiated Silicon
Wed, 8 Feb, 2.15 p.m. Univ. of Southampton	Surface Physics Group	Dr. J.C. Riviere (A.E.R.E.)	A LEED Study of Insulator Surfaces

The following lectures will be given at the I.E.E., Savoy Place, London during the current week.

- Mon, 6 Feb, 5.30 p.m. : "The Place of Mathematics in the Training of Electrical Engineers at University", discussion opened by G.S. Brayshaw.
Wed, 8 Feb, 6.00 p.m. : "Audio Reproduction in the Home", by G.F. Dutton
Fri, 10 Feb, 5.30 p.m. : "Electricity Distribution in Industrial Building Sites" discussion opened by J. Crisp, J.A. Nott and G.L. Leighton.

Wed, 8 Feb, 7.00 p.m. 37 George St. Oxford.	IEE District Meeting	Dr. L.L. Ashton (British Railways Board)	Electrical Research on British Railways
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EVENT AT THE ATLAS LAB.

Mon, 6 Feb, 2.30 p.m. Conf. Rm.	Talk	Dr. D. Barton (Cambridge U.)	A Users' System for Manipulative Algebra.
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EVENTS AT AERE

Tues, 7 Feb, 2 p.m. Conf. Rm, Bldg 8.9.	Theor. Phys. Div. Seminar	Dr. G.L. Sewell (Q.M.C.)	An Approach to Non-equilibrium Statistical Mechanics.
Thurs, 9 Feb, 2 p.m. Conf. Rm, Bldg 8.9.	Joint Applied Maths Group Seminar	Mr. J.G. Hayes (N.P.L.)	Some Surface Fitting Methods using Polynomial.
Thurs, 9 Feb, 3.30 p.m. Conf. Rm, H.8.	Nuclear Phys. Div. Colloq.	Dr. R.N. Glover (A.W.R.E.)	Nuclear Structure Studies with (t,p) Reactions.

Social News

RECREATIONAL SOCIETY. All membership cards for 1967 have been sent out by post. Members are asked to contact the new Membership Secretary, Mr. E.W. Clark, Bldg R.8. if they have not yet received their card.

Please help the Society by completing and returning the club survey slips which were sent out with the cards, as soon as possible. The information on these slips will be of considerable assistance to the Committee in deciding which new clubs to form for use by members.

CHRISTIAN FELLOWSHIP. Thursday, 9 Feb, 12.30 p.m. P.L.A. Conf. Rm. Bible Study on St. John's Gospel, Ch.16. All are welcome.

RECORD SOCIETY 12.30 p.m. Tuesday, 7 Feb, Lecture Theatre.

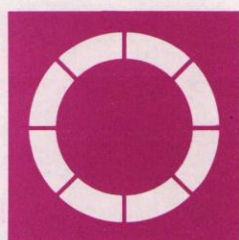
Beethoven Violin Concerto in D, Op. 61 with Charles Cyroulnik as the soloist
and the Colonne Concert Orchestra conducted by Pierre Dervaux.

First performance of this work was given in Vienna on 23 December, 1806 but the whole of the solo part was subsequently revised. However the work didn't really make its mark until 1844. Now of course it is pre-eminent amongst violin concertos. It is written in three movements with an exciting finish to the last movement with the orchestra appearing to be in hot pursuit of the soloist.

Rutherford Laboratory
3.2.67.

H.F. Norris Ext 484
Scientific Admin Group
Building R.20

No. 6/67
14 Feb 67



Rutherford Laboratory Bulletin

General News

VISITORS. Twenty members of the Oxford and District Industrial Accident Prevention Group will visit the Laboratory on Monday 13 February.

SUMMER SCHOOL. A Summer School on Plasma Physics is to be held at the Culham Laboratory from 3-14 July, 1967. Closing date for applications is 6 March. Application forms and further details are available from "The Technical Administration Office, Culham Laboratory, Abingdon, Berks."

SUMMER SCHOOL OF THEORETICAL PHYSICS. The annual NATO Summer Institute will be held at Cargèse (Corsica) from 3-29 July. The programme will be devoted mainly to Quantum Optics and Quantum Electrodynamics. Brief details only are available from H.F. Norris, Bldg R.20, Ext 484.

CONFERENCE. "Making the Bosworth Report Work", a one day conference organised by the I.E.E. and sponsored by the Ministry of Technology and the Council of Engineering Institutions, on the report of the committee on manpower resources for science and technology on the education and training requirements for the electrical and mechanical manufacturing industries. The conference commences at 10 a.m. on Monday, 6th March at the IEE Savoy Place, London. Tickets are available from the Secretary, IEE, Savoy Place, the registration fee is 15/- and should be paid on application for a ticket.

P.L.A. NEWS. Running-time figures from the "P.L.A. Progress Report 1966" which has just been published, show that last year the P.L.A. was scheduled for over 6,200 hours of operation of which nearly 5,500 hours were experimental running time with the beam on target (an efficiency of over 80%). Requests for running-time this present year total more than 7000 hours.

OVERSEAS VISITS. The Director, to CERN, 19-20 Feb, to attend the Fourth Plenary Meeting of the European Committee for Future Accelerators.

Dr. J.A. Beaney, to Saclay, 13 Feb, for two weeks, in connection with the analysis of the K^-p experiment, in collaboration with Saclay.

Mr. P.D. Hey, Mr. W.S. Spinks and Mr. F.C. Lambson, to Italy, 15-18 Feb, in connection with the installation of film processing machines.

Machine Schedules

P.L.A.

Date	Team	Experiment
14-18 Feb	RHEL & QMC 2	(p,n) Reactions by Time of Flight Method.
19 Feb		Accelerator Physics

Internal Events

Mon, 13 Feb, 11.15 a.m. Lecture Theatre	Nimrod Lecture Series	Dr. G. Moorhouse (Glasgow Univ.)	Photo-production of Baryon Resonances and Symmetries
Tues, 14 Feb, Lecture Theatre.	"Motorola Integrated Circuits Seminar". The morning session will be from 10.00 a.m. to 12.30 p.m. and the afternoon session, from 2.00 to 4.30 p.m. approx. The speaker will be Mr. Don Murray, Group Leader responsible for digital integrated circuit applications in Motorola's Geneva European Service Centre. Copies of the programme for the seminar can be obtained from H.F. Norris, Bldg R.20 Ext 484.		
Wed, 15 Feb, 11 a.m. Conf. Rm. R.1.	H.E.P. Discussion Group	A. Carter (Cavendish Laboratory)	KN Forward Dispersion Relations
Wed, 15 Feb, 2 p.m. Conf. Rm. 12	P.L.A. Div Seminar	Dr. R. Gibson (Q.M.C.)	Proposed Experiment. Measurement of D parameter for p-d Scattering at 50 MeV.

External Events

Mon, 13 Feb, 4.45 p.m. Univ. of Bristol	Colloq.	Prof. P.H. Fowler	The Charge Spectrum of Cosmic Radiation
Tues, 14 Feb, 2.30 p.m. 21 Banbury Rd, Oxford.	Nuclear Physics Seminar	Dr. H.J. Rose (Oxford)	Phases of Nuclear Matrix Elements
Tues, 14 Feb, 8 p.m. Lecture Theatre. Univ. Eng. Lab. Oxford.	Inst. of Mech. E. Meeting	Mr. C.G. O'Neill	Atmospheric Pollution by Car Exhausts.
Wed, 15 Feb, 3 p.m. Cambridge Univ.	Elementary Particle Physics Seminar	Dr. J. Uretsky (Argonne)	Threshold Behaviour from Axiomatic Field Theory.
Wed, 15 Feb, 2.30 p.m. Univ. Coll. London	Particle Physics Seminar	Dr. W.S. Woolcock (U.C.L.)	Calculations using Forward Dispersion Relations for Pion-Nucleon and Kaon-Nucleon Scattering.
Thurs, 16 Feb, 4.15 p.m. Univ. of Birmingham	Mathematical Physics Seminar	Dr. C. Michael (RHEL)	Resonances in a Propagator Formalism.
Fri, 17 Feb, 4.15 p.m. Univ. of Birmingham	Elementary Particle Discussion Gp	Dr. G. Manning (RHEL)	CP - Violation - Current Status
Fri, 17 Feb, 4.15 p.m. Clarendon Lab. Oxford	Colloq.	Mr. M.F. Wood (Clarendon Lab.)	The He ³ Dilution Refrigerator
Thurs, 16 Feb, 4.15 p.m. Clarendon Lab. Oxford	Theor. Phys. Seminar	Dr. C.W. Wong	Perturbative Bases of the Nuclear Shell Model.

The following lectures will be given at the I.E.E. Savoy Place, London W.C.2 during the current week:

Mon, 13 Feb, 5.30 p.m.	:	"The Impact of Integrated Circuits on the Role of the Circuit Designer", discussion opened by A.G.I. Cressell and R. Towell
Wed, 15 Feb, 5.30 p.m.	:	"Possible Alternatives to Copper", discussion opened by E.H. Reynolds
Fri, 17 Feb, 5.30 p.m.	:	"High Pressure Gas Breakdown", discussion opened by Dr. A.H. Cookson and G.F. Goldspink.

EVENT AT THE ATLAS LABORATORY

Mon, 13 Feb, 2.30 p.m. Conf. Rm.	Talk	Dr. F.R. Hodson (Cambridge U. & Atlas Lab.)	Problems of Classification in Archaeology.
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EVENTS AT A.E.R.E.

Tues, 14 Feb, 2 p.m.	Theor Physics	Dr. R.M. Felder	Hot Atom Chemistry: a Physical Introduction
Conf. Rm. Bldg 8.9	Div. Seminar		
Thurs, 16 Feb, 2 p.m.	Joint Applied	Mr. I. Barrodale	L, Linear Approximation.
Conf. Rm. Bldg 8.9.	Maths Gp Seminar	(Liverpool Univ.)	

FILMS Siberian Nuclear Research Centre
Dubna: City of Friends in Science.

These two Russian films dealing mostly with CTR and accelerator work will be shown in the Cockcroft Hall at 11.45 a.m. on Tuesday 14 Feb, and at 1.30 p.m. on Wed, 15 Feb. The programme lasts an hour. Both gates to the Cockcroft Hall will be open.

Social News

RECREATIONAL SOCIETY. Annual General Meeting, Lecture Theatre, Wednesday, 15 March, at 12.40 p.m. promptly.

This meeting is for MEMBERS ONLY and apart from the normal election of a new committee, important decisions will have to be made on the possible affiliation of the newly formed S.R.C. Sports Association to the Civil Service Sports Council. Local decisions on future activities, already planned by the retiring committee, will also have to be taken.

Non-members, who may wish to express their opinions, can do so by joining the Society before the end of February by contacting the Membership Secretary, Mr. E.W. Clark, Bldg R.8, as soon as possible.

Entry to the AGM will be by Membership Card or completed Membership Application Form; cards to be shown or completed application forms to be handed in at the door of the lecture theatre.

CHRISTIAN FELLOWSHIP. FILM SHOW, 12.35 p.m. Fri, 17 Feb, Lecture Theatre.

"Martin Luther" (Part 1) "The Ninety Five Theses"

This epic film will be shown in three parts on consecutive Fridays. The first part takes us through the early years of Luther's life when he became a monk. Later, the indignation he felt at the impious practices in the Church at that time led him to nail to the door of his church these famous ninety-five propositions. The film has been hailed as historically accurate by responsible scholars of all traditions.

The P.L.A. Conf. Rm. R.12 will be open as usual on Thursday, 16 Feb, at 12.30 p.m. for a short informal meeting of the Fellowship Group.

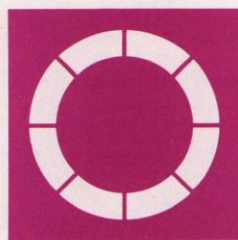
RECORD SOCIETY. 12.45 p.m. Tuesday 14 Feb, Lecture Theatre (Please note change of time for this week only).

"Mediterranean Magic". A light concoction of songs and piano music, guaranteed to make you bring out those travel brochures!!

Rutherford Laboratory
10.2.67.

H.F. Norris Ext 484
Scientific Administration Group
Building R.20

No. 7/67
20 Feb 67



Rutherford Laboratory

Bulletin

General News

LIBRARY NOTICE. Would everyone possessing copies of Mullard's Reference Manual of Transistor Circuits please return them to the Library, Bldg R.20. After being checked against our records they may be reborrowed if desired.

ENDEAVOUR PRIZE ESSAY. Prizes totalling over £200 are offered by Imperial Chemical Industries Ltd., publishers of the international scientific review ENDEAVOUR, for essays on scientific subjects. The subjects for the essays are as follows:

1. The world in 2000 AD
2. The origin of life
3. The control of gene activity
4. New constructional materials
5. Viruses and cancer
6. The hydrogen bond

In addition to the cash prizes, the prizewinners will receive invitations to attend the whole of the British Association meeting at Leeds from 30 August to 6 September, 1967. Accommodation will be provided in Leeds and travelling expenses within the United Kingdom will be paid. The latest date for receipt of entries is 1 June 1967. Further details from H. Norris, Bldg R.20 Ext 484.

RADIATION PROTECTION NOTICE. Period 3 commences Monday, 20 February. The colour strip will be GREEN for $\beta\delta$ and fast neutron films. All users are requested to change their films promptly.

EXTERNAL COURSES. Details of courses on "Radiation Chemistry" and "An Introduction to Molecular Theory", to be held at the Liverpool Regional College of Technology during the Spring of 1967 may be obtained from H.F. Norris Bldg R.20 Ext 484.

CONFERENCE. The Spring Meeting of the Institute of Welding will be held overseas for the first time. This joint Anglo-German Welding Conference is from 4-7 April. Full details from H.F. Norris, Bldg R.20 Ext 484.

EXHIBITION. System Computers Ltd., are to hold a demonstration of their range of laser equipment at their London Office, 5th Floor, St. Andrews House, 40 Broadway, Westminster, London S.W.1 between 10 a.m. and 5 p.m. 28 February to 2 March inclusive. It will include both r.f. and d.c. educational and scientific gas laser systems and accessories and examples of solid state pulsed laser equipment. In addition, "low cost" analogue computing and logic teaching machines will be shown. Further information from their London Office, Tel. No. Whitehall 3984-7.

UNCLAIMED MAIL. A letter has been received from ABE (Great Britain) Ltd., in answer to a letter dated 17 October 66 from someone at the Rutherford Laboratory. The subject of the letter is HBO 100 W/2 Lamps. The person concerned can collect this letter from Scientific Administration Group, Room 21, Bldg R.20.

P.L.A. NEWS. The P.L.A. will be shut down from 20 February to 5 March inclusive.

CONFERENCE ON ELEMENTARY PARTICLES AT UNIVERSITY COLLEGE, LONDON, 17-19 APRIL, 1967. The closing date for contributing papers to this conference has now been extended to Tuesday, 28 February. The final date for application for attendance has been extended to Wednesday, 15 March.

OVERSEAS VISIT. Dr. G.H. Stafford, to CERN-SACLAY, 22-23 Feb, to give a lecture.

Mr. J.D. Lawson, to the USA and Canada, 25 Feb for three weeks, to attend the 1967 National Particle Accelerator Conference at Washington and to visit various Laboratories.

Mr. D.A. Gray, Dr. J.T. Hyman and Mr. H.C. Brooks to the USA, 27 Feb for three weeks to attend the Accelerator Conference at Washington and to visit various accelerator laboratories for discussions.

ATTACHMENT. Dr. M.R. Jane, to CERN, 25 Feb for about one year's attachment, to take part in the $K_2^0 \rightarrow 2\pi^0$ decay interference experiment.

Internal Events

Mon, 20 Feb, 11.15 a.m.
Lecture Theatre

Nimrod Lecture
Series

Dr. D.V. Bugg
(RHEL)

Nucleon-Nucleon Scattering below 1 GeV:
A New Look at an Old Knot.

External Events

Mon, 20 Feb, 4.15 p.m.
Queen Mary College

Theor Phys.
Seminar

Prof. D. Bohm
(Birkbeck Coll.)

Collective Treatment of Liquid Helium

Mon, 20 Feb, 4.45 p.m.
Univ. of Bristol

Colloq.

Prof. F.R.N. Nabarro
(Johannesburg)

Steady-State Diffusional Creep

Tues, 21 Feb, 7.30 p.m.
Slough College, Slough

IERE Meeting

J.R. Jarvis

Pulse Code Modulation
(Visitors welcomed)

Thurs, 23 Feb, 4.15 p.m.
Univ. of Birmingham

Mathematical Physics
Seminar

Mr. D. Elias
(Oxford)

Current Algebra and some Applications

Thurs, 23 Feb, 4.15 p.m.
Clarendon Lab. Oxford.

Theor. Phys.
Seminar

Dr. J.C. Taylor

Sum Rules Resulting from Asymptotic
Behaviour of Scattering Amplitudes

Thurs, 23 Feb, 5.30 p.m.
Imperial Coll. London

Inst. of Maths
Lecture

Prof. W. Ledermann
(Univ. of Sussex)

A Concrete Approach to Abstract Algebra

Fri, 24 Feb, 4.15 p.m.
Clarendon Lab., Oxford.

Colloq.

Dr. C. Froidevaux
(Univ. of Paris)

A Magnetic Resonance Study of Single and
Paired Electrons in Minute Metallic Particles.

The following lectures will be given at the IEE Savoy Place, London, WC2 during the current week:

Mon, 20 Feb 2 p.m. :

"Precision Resistance Standards", colloquium

Mon, 20 Feb, 9.30 a.m.

"Message Switching", colloquium.

Tues, 21 Feb 5.30 p.m.

(a) "The Calculation of Switching Phenomena in Power Systems"

(b) "Methods for the Calculation of Switching Transients with Particular Reference to Line
Energisation"

Wed, 22 Feb, 5.30 :

"Lightning Performance of British High-Voltage Distribution Systems", by R.H. Golde.

Thurs 23 Feb, 5.30 p.m.

"The Manley-Rowe Relations", discussion opened by Prof. J. Brown.

Fri, 24 Feb, 5.30 p.m.

"Analysis and Measurement of Radial Power Flow in Machine Airgaps", by M.R. Harris and W.Z. Fam.

EVENTS AT AERE

Tues, 21 Feb, 2 p.m. Conf. Rm, Bldg 8.9.	Theor Phys. Div. Seminar	Dr. J.M. Soper	Pseudonium and Related Pseudonucllei
Thurs, 23 Feb, 2 p.m. Conf. Rm, Bldg 8.9.	Joint Applied Maths Gp Seminar	Mr. J.E. Parker (A.W.R.E.)	Some Statistical Problems in Forensio Science
Thurs, 23 Feb, 3.30 p.m. Conf. Rm. H.8.	Nuclear Phys. Div. Colloq.	Dr. P. Burke	Multi-channel Scattering in Electron-atom Collisions

EVENT AT CULHAM

*Fri, 24 Feb, 2.30-4.30 p.m. Discussion Meeting Lecture Theatre	The Institute of Physios & the Physical Society.	The Present Role of the Institute and Society - Is it Adequate
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(*Details from Dr. D.F. Jephcott, Culham Lab, Ext 535, Open to all).

Social News

CHRISTIAN FELLOWSHIP FILM SHOW, 12.35 p.m. Fri, 24 Feb, Lecture Theatre.

Martin Luther (Part 2) "By Faith Alone"

The PLA Conf. Rm, R.12 will be open as usual on Thursday, 23 Feb, at 12.30 p.m. for a short informal meeting at the Fellowship Group.

RECORD SOCIETY. 12.30 p.m. Tuesday, 21 Feb, Lecture Theatre.

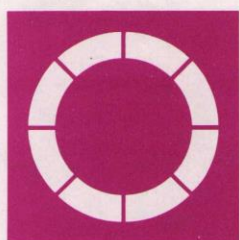
Mozart Piano Concertos: A Major K 488 and C Minor K.491 with Solomon as the soloist with the Philharmonia Orchestra, conducted by Herbert Menges.

Both these concertos are late works and the C Minor in particular is widely regarded as the culmination of Mozart's achievement in the field of the piano concerto.

Rutherford Laboratory
17.2.67.

H.F. Norris Ext 484
Scientific Administration Group
Building R.20

No. 8/67
27 Feb 67



Rutherford Laboratory Bulletin

General News

NEW HALL THREE CEREMONY. On Tuesday, 28 February at 11.00 a.m. the Director, Dr. T.G. Pickavance will turn the "first sod" on the site of the new Hall 3 Experimental Area for Nimrod. The Director is expected to break with tradition in not using a spade but will, it is hoped, operate the appropriate levers in an excavator.

ATLAS LABORATORY APPOINTMENT. Miss Joan E. Walsh, M.A. (Camb.), D. Phil, now in the Mathematics Department at the University of Manchester, has been appointed to a Joint Research Fellowship with the Atlas Laboratory and St. Hilda's College, Oxford, for a period of one year from October, 1967.

VISITORS. About 30 members of the Department of Nuclear Physics, Oxford University, will visit the Laboratory on Saturday, 4 March.

RADIATION PROTECTION NOTICE. It is now Period 3 for $\beta\delta$ and fast neutron films, colour strip - GREEN. Please make sure you are wearing the current film.

FOUND. AERE Translations Office recently translated for a members of the Laboratory staff, whose name they do not recall, a Russian leaflet about camera equipment. The translation was found in the road and returned to the Translation Office. Will the requester please phone 72-2031.

EXTERNAL SYMPOSIUM Details of a symposium on "Process Control Instrumentation" to be held at the Liverpool Regional College of Technology, 4-6 April, 1967 may be obtained from H.F. Norris, Bldg R.20, Ext 484.

NIMROD OPERATIONAL AGAIN. Nimrod is scheduled to start up again on Tuesday, 28 February after a 6 weeks shutdown. It is planned to run continuously until about September, apart from the 12 hour maintenance period every third week.

RUTHERFORD LABORATORY ON T.V. Some four months ago a unit from Granada Television spent 10 days at the Laboratory filming Nimrod and some of the associated experimental work, for a series of Programmes for Science Sixth Forms. The first programme on the series of four was televised on Wednesday 22 Feb, at 2.05 p.m. and the following three programmes will be shown at the same time on 1, 8 and 15 March. After the series has been completed, it is hoped to show the film at the Laboratory.

ROYAL SOCIETY FOR THE PREVENTION OF ACCIDENT AWARDS. The Director presented safe driving awards to Laboratory drivers on Wednesday last. The awards were made to Mr. H. Paterson - 10 year medal; Mr. D. Livingstone - second bar to 5 year medal; Mr. E.A. Smith - Diploma, fourth year; Mr. A. Hill - Diploma, third year, Mr. D. Gadd - Diploma, first year. Mr. R.E. Smith - Diploma, third year, will receive his award on his return from sick leave.

LONDON SEMINAR ON HIGH ENERGY PHYSICS. The next meeting of this seminar will be held at the Lecture Room, Royal Society Burlington House, Piccadilly, W.1 on Monday, 13 March at 2 p.m., when Prof. L.M. Lederman (Columbia U.) will speak on "The Search for Heavy Particles, (Maximans)". Enquiries re this lecture to Prof. E.H.S. Burhop, U.C.L., Gower St. London W C 1.

Machine Schedules

NIMROD Cycle 1 (28.2.67. - 21.3.67.)

1. Machine Physics
2. High Energy Physics

Team	Beam	Experiment	
Birmingham/ Imperial Coll./Glasgow	K1	K ⁻ d run in the Saclay Bubble Chamber	Data
AERE/QMC/AERE	π^+ 4	A study of $\Sigma\beta$ decay	Setting up.
Bristol	π^+ 5	π^+ p differential cross-section measurements	Setting up
Westfield Coll./RHEL	π^+ 6	Measurement of the decay parameters of the Σ^+	Setting up

Internal Events

Mon, 27 Feb, 11.15 a.m. Lecture Theatre	Nimrod Lecture Series	Dr. L.D. Lella (CERN)	Polarization in Pion-Proton and Proton-Proton Scattering from 6-12 GeV/c.
Wed, 1 Mar. 11 a.m. Conf. Rm. Bldg R.1.	HEP Discussion Group	(a) Strangeness + Baryons by Dr. A.W. Hendry (RHEL) (b) Possible CP Noninvariant Effects in $U\pi^0$ Decay of Charged K Mesons by Dr. G. Costa or Dr. P.K. Kabir (RHEL)	
Mon, 27 Feb, 2 p.m. Lecture Theatre	Nimrod Users Meeting		

External Events

Mon, 27 Feb, 4.15 p.m. Queen Mary College	Theor. Phys. Seminar	Prof. M. Bailyn (Northwestern U. & Leeds)	Magnetic Impurities: the Kondo Effect.
Mon, 27 Feb, 4.45 p.m. Bristol Univ.	Colloq.	Dr. M.V. Berry	Rainbow Scattering in the Classical Limit
Mon, 27 Feb, 5 p.m. University of Reading	Phys. Dept. Colloq.	Prof. I.M. Mills (Univ. of Reading)	Vibrational Force Constant Calculations for Small Molecules
Tues, 28 Feb, 2.30 p.m. 21 Banbury Rd, Oxford.	Nuclear Phys. Seminar	Dr. W.R. Hamilton (Sussex)	Parity Violations Associated with Electro-Magnetic Processes.
Wed, 1 March, 2.30 p.m. Univ Coll. London	Particle Phys Seminar	Dr. N.D. Dombey (Sussex)	Photo Production of Pions in the Second Resonance Region
Wed, 1 Mar, 3 p.m. Cavendish Lab, Cambridge	Elementary Particle Physics Seminar	Dr. T.G. Walker (Westfield)	Current Status of the N π^- (1400) Resonance

Thurs, 2 Mar., 4.15 p.m. Seminar Dr. S. Leeman Non-Local Potentials in Two-Body Scattering
Univ. of Birmingham (Birmingham)

The following lectures etc., will be given at the IEE, Savoy Place, London, during the current week:

Mon, 27 Feb, 5.30 p.m. : "Storage Systems for Telephone Switching" by J.R. Pollard
Wed, 1 Mar., 9.30 a.m. : Colloquium on "Colour Television Cameras".
Thurs, 2 Mar., 5.30 p.m. : "Control: A Unifying Force in Engineering Education", discussion opened by Prof. J.C. West and Prof. R.J.A. Paul.

EVENTS AT A.E.R.E.

Tues, 28 Feb., 2 p.m. Conf. Rm. Bldg 8.9.	Theor. Phys. Div. Dr. K.P. Jain Seminar	Low Temperature Properties of Dilute Magnetic Alloys
Fri, 3 Mar., 9.15 a.m. Conf. Rm. Bldg 8.9.	Theor. Phys. Div. Prof. G. Benedek Seminar (M.I.T.)	The Spectrum of Light Scattered from Solutions of Biological Macro-Molecules.

EVENT AT THE CULHAM LABORATORY.

Thurs, 2 Mar., 11.30 a.m. Lecture Theatre	Joint Applied Maths Grp.	Mr. C.W. Glenshaw Mr. A.R. Curtis Mr. G.F. Miller Mr. L. Fox Mr. J.C.P. Miller	Symposium on Quadrature
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Social News

CHRISTIAN FELLOWSHIP FILM SHOW. 12.35 p.m. Fri., 3 March, Lecture Theatre.

Martin Luther (Part 3) "Champion of the Faith"

This is the closing part of the trilogy. It describes his work after the Diet at the city of Worms, i.e. his translation of the Bible into German, his pastoral work and his attitude to the civil unrests of those times. All are welcome.

Thurs, 2 March, 12.30 p.m. R.2 (Top floor) Conference Room. Meeting for discussion.

RECORD SOCIETY 12.30 p.m., Tuesday 28 February, Lecture Theatre.

"Scheherazade" by Rimsky-Korsakov

A repeat of the stereo record which was presented nearly two years ago, with the London Symphony Orchestra conducted by Sir Eugene Goossens. This work by one of the world's acknowledged masters in orchestration is founded on the "Arabian Nights, although only by implication. The rich and colourful atmosphere evoked in this work has a magical quality about it which requires brilliant solo and orchestral interpretation.

Rutherford Laboratory
24.2.67.

H.F. Norris Ext 484
Scientific Administration Group,
Building R.20