

No. 1/66
3 Jan 66

General News

MISSING EQUIPMENT The following items of equipment have been reported missing:

Avo Model 8 - Ser. No. 141353-C-662
Avo Model 8 - Ser. No. 42088-C-1255

These items are missing from Lab. 7, Bldg. R.1 and anyone with information on their present whereabouts is asked to contact Mr. J.K. Robins, Rm. 1.6 Bldg R.25 or Lab 7 Bldg R.1 Ext 394.

"Handbook of Adhesives" by Irving Skeist

This handbook is missing from Bldg R.8 and anyone with information on this item is asked to contact Mr. J.D. Langridge, Bldg R.8 Ext 233.

SUMMER VACATION COURSE 1966 Details are now available of the Summer Vacation Course to be held at C.E.R.N. Vacancies are available in the following: Participation in Experiments, Development and Operation of Experimental Facilities and Research into the Design of Future Experiments. Appointments will normally last from two to four months, and applicants must have completed at least three years of university training by the summer of 1966. Those selected will be able to supplement their practical experience by a special series of lectures on such subjects as theoretical physics and computer programming. These lectures will take place between 1 July and 30 September 1966. The closing date for applications is 1 March 1966. Further information may be obtained from H.F. Norris, Bldg R.20 Ext 484.

EXTERNAL COURSES. The Borough Polytechnic, London S.E.1 have announced details of the following courses:

"The Transmission of Information and Pulse Communication", a course of six lectures to be held on Monday evening from 6.30-8.30 p.m. commencing 10 January.
"Nucleonic Circuitry", a course of twelve lectures to be held on Wednesday evenings at 7 p.m. commencing 19 January

Further details may be obtained from Mrs. S.A. Fones, Personnel Branch, Bldg R.20, Ext 585.

CONFERENCES. The Institute of Physics and the Physical Society have arranged the following conferences to be held in 1966:

4-7 January	:	"Solid State Physics", at the Manchester College of Science & Technology.
28 January	:	"Physics of Testing Concrete", at London
15 February	:	"Spin Resonance and Allied Topics", at London
23 February	:	"Stress Analysis of Granular Materials", at London
4 March	:	"Refractory Materials", at London
10 March	:	"Dilute Solutions of Transition Metals at Low Temperatures", at London
28-31 March	:	"Physics Exhibition" at London
29 March-1 April	:	"Ultra-Violet and X-Ray Spectroscopy of Laboratory and Astrophysical Plasmas", at the Culham Laboratory, Abingdon.
30 March-1 April	:	"Nuclear and Particle Physics", at the Univ. of Oxford.
4-7 April	:	"Scattering, Non-Linear Optics and Electro Magneto-Optics" at the Univ. of York.
6-7 April	:	"Phonons", at the Univ. of Edinburgh
13-15 April	:	"The Integration of Physics and Chemistry Teaching", at the Univ. of Leeds.
14-15 April	:	"Crystallography of Ceramics", at the Univ. of Nottingham
19-21 April	:	"The Performance Assessment of High Vacuum Pumps", at the Univ. of Sussex.
21-22 April	:	"The Early Stages of Constitutional Change in Metals and other Materials and Their Effects on Mechanical Properties" at the National Physical Laboratory.

In addition the following lectures will be given:

Tuesday, 4 January at 4.30 p.m., Manchester College of Science and Technology; "Helium-3 as a Fermi Liquid" to be given by Prof. J.C. Wheatly (Univ. of Illinois), who has been awarded the fourth Simon Memorial Prize. The presentation will be made at the lecture.

Monday, 28 March at 8.15 p.m. College of Technology, Oxford. The 1965 Guthrie Lecture entitled "Nuclear Fusion Research" will be given by Dr. J.B. Adams (Controller of the Ministry of Technology, Director of Culham Laboratory).

NATIONAL SAVINGS. For the attention of weekly paid staff. The current National Savings Cycle No.61 finishes on 19 December and certificates will be available for collection from the Cash Office, Bldg R.20 on 6 January, 1966.

ORBIT. Owing to the late arrival on Thursday, 23 December, it was not possible to carry out the normal distribution. Those people who were not able to obtain their copy of the December issue before Christmas are asked to collect a copy from their Local Administration Office.

CONFERENCES ETC. The Institute of Mathematics and its Application has announced advanced details of a residential conference on "The Mathematics of Control Systems", to be held at Sunderland Technical College on 3-6 April.

Wirelect Industrial Electronics have announced details of their 4th Annual Exhibition and Symposium on "Electronic Instruments and Components for Industry", to be held at the Dept. of Physics, Univ. of Bristol, 4-6 January 1966, 9.30 a.m.-5.30 p.m. daily. Full details may be obtained from H.F. Norris, Bldg R.20, Ext 484.

OVERSEAS VISIT. Dr. C.J.S. Damerell M.E.P. Counter (Univ.) Gp. leaves for the U.S.A. on a 13 Months attachment at the Brookhaven National Laboratory as a Guest Research Associate in the Physics Department.

Internal Events

Wed., 5 Jan, 2 p.m. Conf. Rm. R.12.	P.L.A. Div. Seminar	D. Watson (Birmingham)	Polarization Effects in Inelastic Scattering.
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Wed., 5 Jan, 12.40 p.m. Thurs, 6 Jan., 1.15 p.m. Lecture Theatre	Film	"Principles of the Optical Maser" a 30 minute colour film, Bell Telephone Laboratories, U.S.A.
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Dr. C.G.B. Garrett of the Bell Telephone Laboratories explains with diagrams and laboratory demonstrations, the various means by which the maser's photon chain reaction is induced. The principle types of gas and solid state optical masers are also shown.

Mon., 10 Jan, 11.15 a.m., Lecture Theatre.	Nimrod Lecture Series	Dr. G. Barton (Sussex Univ.)	Title will be announced in the next Bulletin.
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External Events

A.E.R.E.

Thurs, 6 Jan 2 p.m. Conf. Rm Bldg S.9	Applied Maths Group. Seminar	Mr. B. Allen (Oxford Univ)	The Numerical Solution of the Calculus of Variations Problem
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Social News

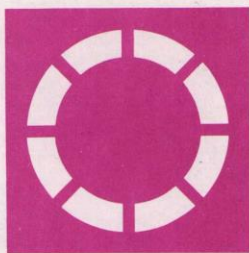
FILM SHOW See Internal Events for details of this week's film show.

RECORD PROGRAMME. 12.30 p.m. Tuesday 4 January, Lecture Theatre.

Military Band Music played by the Royal Marines Band.

Rutherford Laboratory
31 December 1965

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



Rutherford Laboratory Bulletin

No. 2/66
10 Jan 66

General News

NEW YEARS' HONOURS. Mr. P. Bowles, Chief Engineer of the Rutherford High Energy Laboratory was awarded the OBE

Mr. J.A. Macken, Foreman of the Experimental Areas in the P.L.A. was awarded the BEM.

EXTERNAL COURSE. The Borough Polytechnic, London, S.E.1 have announced details of the following course:

"Reliability Engineering for Electronic Systems", a course of six lectures to be held on Tuesday evenings from 6.30 - 8.30 p.m. commencing 8 February.

Further details may be obtained from Mrs. S.A. Fones, Personnel Branch, Bldg R.20 Ext 585.

EDUCATION AND TRAINING DEPARTMENT A.E.R.E. Details have been received of various courses arranged for the period January to July 1966. These courses will be Scientific and Technological; Management; Executive; Clerical and Secretarial and Technical. Further details may be obtained from Mrs. S.A. Fones, Personnel Branch.

CONFERENCE. The 1966 British Joint Computer Conference will be held at Eastbourne from 3-5 May. Further information can be obtained from "The Conference Secretary, I.E.E., Savoy Place, London W.C.2.

OVERSEAS VISITS. Mr. P. Bowles will visit Brown Boveri; Oerlikon; Physikalisches Institut, Zurich for discussions. Also to C.E.R.N. for a general review of engineering development. He will be away from 9-11 January.

Dr. F.M. Russell, to Europe, 7-16 January for discussions on accelerator research at C.E.R.N. and Zurich. He will also visit Karlsruhe to give an invited lecture on the SOC.

Machine Schedules

P.L.A.

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
10-13 Jan		Maintenance
14-19 Jan	UCL	Measurement of p-p Differential Scattering Cross-section at 50 MeV.

Internal Events

Mon, 10 Jan, 11.15 a.m. Lecture Theatre	Nimrod Lecture Series	Dr. G. Barton (Sussex Univ.)	Electro-magnetic Properties of Particles
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Wed., 12 Jan 12.40 p.m.	Film	Power from Fusion - Part 2.
Thurs, 13 Jan, 1.15 p.m.		The Problem of Containment.
Lecture Theatre		UKAEA 40 min. Colour film.

After a brief introduction of the theory of fusion, the film continues, by means of animation and actual experiments, with the story of the various processes used over the last ten years or so up to mid 1965, by which time some of the worst instabilities had apparently been cured.

Wed, 12 Jan, 3.30 p.m. Lecture Theatre	Popular Lecture Series	Dr. W. Chapman (QMC)	Proton-Proton Small Angle Scattering Measurements (P2 Experiment)
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Please note that the above lecture was postponed on the 15 December. The remainder of the lectures in this series have been rearranged, and details will be given in future bulletins.

Mon, 17 Jan, 11.15 a.m. Lecture Theatre	Nimrod Lecture Series	Dr. G. Moorhouse (RHEL)	N* Resonances.
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MOBILE EXHIBITION. A display of electronic instruments and lasers by Messrs G & E Bradley Ltd., will be held on Monday, 17 January, 9.30 a.m. - 4.30 p.m., adjacent to Building R.20. (Further details from B.E. Kingdon, R.20, Ext 6297).

External Events

Wed, 12 Jan, 2.15 - 6.30 p.m. Institute of Mathematics Symposium on "Gains to Mathematics Teaching from a Decision to go Metric", at Imperial College, London.

Wed, 12 Jan, 7 p.m., 37 George St. Oxford.	I.E.E. District Meeting	Dr. P.R. Howard (CERL Leatherhead)	Research in the Electricity Supply Industry.
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Wed, 12 Jan, 7.15 p.m., Reading Technical College	I.E.R.E. Thames Valley Section Meeting	Mr. B.G. Starr (Mullard Eqpt Ltd)	The Automatic Control of Cranes using Mullard Digital Circuit Elements
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A.E.R.E.

Tues, 11 Jan, 2 p.m., Conf. Rm, Bldg 8.9	Theor Phys. Seminar	Dr. P. Burke	Application of Minimum Principles to Atomic Scattering.
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Thurs, 13 Jan, 2 p.m., Conf. Rm, Bldg 8.9	Applied Maths Group Seminar	Dr. J. Reid (Univ. of Sussex)	The Numerical Rank of a Matrix
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Social News

RECORD PROGRAMME. 12.30 p.m., Tuesday, 11 January, Lecture Theatre.

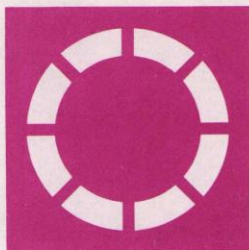
The programme this week is of especial interest to opera lovers. It has the intriguing title of the "Art of the Prima Donna". In this stereo recording, Joan Sutherland illustrates the development of the tradition of "bel canto" in arias from operas by Verdi, Gounod, Delibes and others. The recording is a homage to the art of soprano singing as exemplified by great artists of the past.

CHRISTIAN FELLOWSHIP. The present series of meetings led by outside speakers will continue on Thursday, 13 January at 12.30 p.m. in the P.L.A. Conference Room R.12, when the Rev. Keith Watson, Vicar of St. Ebbe's, Oxford will speak on "Main in the Light of the Bible - The Jew". The meetings are open to all, and we shall be very glad to welcome new members. Further details may be obtained from B.E. Kingdon, R.20, Ext 6297.

FILM SHOW. See "Internal Events" for details of this weeks' film show.

Rutherford Laboratory
7 Jan 66

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



Rutherford Laboratory Bulletin

No.3/66
14 Jan 66

General News

FOUND A set of manuscript note on Polymers topped by a sketch headed "Iron-Carbon Equilibrium Diagram" has been found in the R.9 area and handed in to the R.1 Admin Office, where it will be held until claimed.

ENRICO FERMI FELLOWSHIPS. The Enrico Fermi Institute for Nuclear Studies of the University of Chicago is inviting applications for post doctoral fellowships for the academic year 1966-67. These Fellowships will be awarded yearly, on a competitive basis, to recent Ph.D.'s in physics and chemistry, with interests in the research areas in which the Institute is active. Closing date for applications is 15 March. Further details may be obtained from H.F. Norris, Bldg R.20 Ext 484.

BURSARIES. Applications are invited for awards under the Royal Society and Nuffield Foundation Commonwealth Bursaries Scheme beginning during the period from July-December, 1966 or later. The closing date for application is 15 March 1966. Details may be obtained from H.F. Norris Bldg R.20, Ext 484.

CONFERENCE. Further details have been received from the Institute of Physics and the Physical Society regarding the conference to be held at University of Oxford on 30 March - 1 April. The title has been changed to "Nuclear Structure and Elementary Particles."

OVERSEAS VISIT. The Director will visit CERN 17-18 January to attend a meeting of European Advisory Committee.

Machine Schedules

P.L.A.

Date	Team	Experiment
17-19 Jan	U.C.L.	Measurement of p-p Differential Scattering Cross-section at 50 MeV.
20-23 Jan	Oxford Univ.	C1 ³⁵ and Na ²³ (p,t) and (p, He ³) Studies of Isobaric Analogue States

Internal Events

Mon, 17 Jan, 11.15 a.m. Lecture Theatre	Nimrod Lecture Series	Dr. G. Moorhouse (RHEL)	N* Resonances
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Mobile Exhibition. A display of electronic instruments and lasers by Messrs. G & E Bradley Ltd., will be held on Monday, 17 January, 9.30a.m.-4.30 p.m. adjacent to Bldg R.20 (Items on show will include A.C. and D.C. voltage calibrators, battery oscilloscopes, electronic multimeters and various types of gas and ruby lasers).

Wed, 19 Jan, 2 p.m. PLA Conf Rm, Bldg R.12	PLA Div Seminar	Dr. K. Chackett (RHEL)	Isomer Ratios
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Wed, 19 Jan 12.40 p.m. Thurs, 20 Jan, 1.15 p.m. Lecture Theatre	Film	History of Motor Racing - Part 2: "The Golden Age", 38 minutes, black and white, sound.
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Part 1 of this series was shown at the beginning of November last year and was extremely popular. Part 2 to be shown this week starts with the revival of racing after the First World War and continues through till the end of the "twenties". These were the days when new cars appeared every year with names that have remained famous, such as Duesenberg Fiat, Sunbeam, Alfa-Romeo, Delage and Bugatti. The early part of the film is concerned with Indianapolis and the French Grand Prix races; the later part of the film sees the rise of sports-car racing with the 24 hour Grand Prix d'Endurance at Le Mans becoming of world interest and the "Bentley Boys" a legend.

Mon, 24 Jan, 11.15 a.m. Lecture Theatre.	Nimrod Lecture Series	Dr. P.I.P. Kalmus (RHEL)	Σ^0 Polarization in the Reaction $\pi^- p \rightarrow K^0 \Sigma^0$ at 1.5 and 1.8 GeV/c.
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External Events

Thurs, 20 Jan, 4.15 p.m. Clarendon Lab, Oxford.	Theor. Phys. Seminar	Prof. G.S. Rushbrooke	The Classical Theory of Fluids
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A.E.R.E.

Thurs, 20 Jan, 2 p.m. Conf. Rm, Bldg 8.9	Applied Maths Gp Seminar	Mr. T.A.G. Nicholson & Mr. E.J. York	Finding the Shortest Route between two points in a Network. Preliminary Search for the Complex Zeros of Polynomials (Determination of Argument)
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Thurs, 20 Jan, 3.30 p.m. Conf. Rm, H.8.	Nuclear Phys. Colloq	Dr. H.H. Atkinson (RHEL)	Polarized Proton Targets for N.P. Experiments
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Social News

FILM SHOW See "Internal Events" for details of this weeks film.

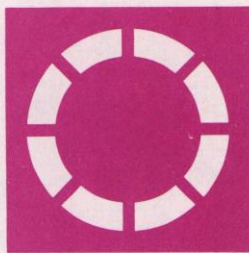
RECORD PROGRAMME. Tuesday, 18 January, 12.30 p.m., Lecture Theatre.

"Louis Armstrong at the Crescendo". This recording by Louis Armstrong All Stars was made in Gene Norman's club on the Sunset Strip in Los Angeles on 21 January, 1955. So much has been written about "Satchmo" that a brief word about some of the other members of the band may be interesting. Barney Bigard one of the greatest of the New Orleans exponents of jazz clarinet is featured in "Rose Room". He was born in 1906 in New Orleans and is almost as well known as Armstrong. Billy Kyle, piano, started playing in bands in 1930 when he was sixteen. Trummy Young, trombonist, was born in 1920 in Savannah, Georgia and has played with many famous bands including the Earl Hines, Jimmy Lunceford and Charlie Barnet bands. In this recording he is featured in "Taint what you do". Amongst the numbers played is "Tin Roof Blues" dating back to the early twenties, and another great favourite of the last war "Stompin' at the Savoy".

Date for your diary: 19-29 January. International Racing Car Show, at Olympia, London. This is the place to see all those special parts etc, that will make your car exceed 70 m.p.h.!!

Rutherford Laboratory
14.1.66.

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



Rutherford Laboratory Bulletin

No. 4/66
24 Jan 66

General News

OVERSEAS VISITS. Dr. E. Pickup and Dr. L.K. Rangan, to CERN, 24-26 January for discussions on the 14 GeV/c K experiment and to attend a Track Chamber Committee meeting.

Dr. R.H. Thomas, to CERN 25-28 January, for discussions on shielding, induced activity and radiation damage.

Dr. I. Good, Atlas Laboratory left for Australia on 19 January, to attend the Summer Institute of Research in Statistics at Melbourne on 24 and 25 January.

EXTERNAL COURSE. A course of eight lectures will be given at the Enfield College of Technology on "Cryogenics - Low Temperature Engineering". The course will commence on Tuesday, 8 February, 6.30-8.30 p.m. The fee is £2 10s 0d. Further details may be obtained from Mrs. S. Fones, Personnel Branch, Bldg R.20, Ext 585.

Machine Schedules

P.L.A.

Date	Team	Experiment
24-26 Jan		Maintenance
27 Jan	RHEL & QMC-1	Neutron Polarization Studies
28-30 Jan	RHEL	Proton Elastic and Inelastic Scattering from Mg ²⁴

Internal Events

Mon, 24 Jan 11.15a.m. Lecture Theatre	Nimrod Lecture Series	Dr. P.I.P. Kalmus (RHEL)	Σ^0 Polarization in the Reaction $\pi^- p \rightarrow K^0 \Sigma^0$ at 1.5 and 1.8 GeV/c.
Mon, 24 Jan 2p.m. Lecture Theatre			Nimrod Users Meeting
Wed, 26 Jan, 12.40 p.m. Thurs 27 Jan, 1.15 p.m. Lecture Theatre		Film	"Radiation in Perspective" a USAEC, 43 min Colour film

This week we return from the hazards of motor racing to the hazards of radiation. At the Rutherford Laboratory the main areas where radiation is experienced are around Nimrod, the P.L.A. and the Nuclear and Radiochemistry Wing. The film, in the form of a lecture, presents an approach to the understanding of the radiation problem. It summarizes some of the beneficial uses of radioactive materials that justify acceptance of the hazard. After dealing with the internal and external radiation problem, information is given on ionization background levels of radiation, the roentgen, and the various radiation levels required to produce immediate injury etc. Various other aspects of the problem are dealt with including shielding.

Wed, 26 Jan, 3.30 p.m. Lecture Theatre	Popular Lecture Series	Dr. D.V. Bugg (RHEL)	Proton-Proton and Proton-Neutron Total Cross-Section Measurements (P4 Experiment)
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External Events

A.E.R.E.

Tues, 25 Jan, 10.45a.m. Conf. Rm. Bldg 7.21	Synchrocyclotron & Proton Physics Group Colloq.	Dr. J.A. Edington (QMC)	Proton Bremsstrahlung at 140 MeV
Thurs 27 Jan 2p.m. Conf. Rm, Bldg 8.9	Applied Maths Grp. Seminar	Mr. A.R. Curtis	Splines as Interpolating Functions

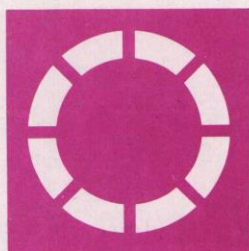
Social News

CHRISTIAN FELLOWSHIP. Thurs., 27 Jan, 12.30, Conf Rm R.12. Bible Study on Epistle to Titus, led by Mr. J. Thomas. All welcome. Details from B.E. Kingdon.

RECORD PROGRAMME. 12.30 Tues, 25 Jan, Lecture Theatre, Moussorgsky: "Pictures at an Exhibition". Stereo version by Sargent and L.S.O.

Rutherford Laboratory
21.1.66.

H.F. Norris Ext 484



Rutherford Laboratory Bulletin

No. 5/66
31 Jan 66

General News

EXTERNAL COURSE The Borough Polytechnic, London SE1 have announced a course of eight lectures on "Law for Scientists and Engineers", to be held on Thursday evenings commencing 3 February at 6.30 p.m. Further details may be obtained from Mrs. S.A. Fones, Personnel Branch, Bldg R.20 Ext 585.

MISSING EQUIPMENT The following item of equipment has been reported missing:

Wee Megger Tester - Ser. No. 1649144

Will anyone with information on the whereabouts of this item please contact Mr. J.V. Smith Rm 1.6 Bldg R.1, Ext 6634

OVERSEAS VISITS. Mr. D.R. Moore, to Paris, 2-4 February to attend the next European meeting on vacuum standards.

Mr. D.H. Lord, to Dubna, Moscow, on 5 February for two weeks to assist on a project to construct a high speed measuring machine for spark and bubble chamber film.

Machine Schedules

NIMROD Period 1 - Cycle 1 1966 (31.1.66.-21.2.66.)

Machine Physics
Extracted Proton Beam Studies
High Energy Physics

<u>Team</u>	<u>Beam</u>	<u>Experiment</u>	
UCL/Westfield Coll.	π^- 2	π^+p differential cross-section measurements	Setting up
Oxford Univ.	K4	A study of the decay modes of the K^+	Setting up
Birmingham Univ/ Cambridge Univ/RHEL	K6	K^- -nucleon total cross-section measurements	Setting up
UCL/Bristol Univ.	P3X	Study of the η^0 meson (Heavy Liquid Bubble Chamber)	Data
Imperial Coll.	ϕ 1	A study of the $\phi \rightarrow e^+ + e^-$ decay	Setting up
RHEL/Oxford Univ.	K7	π^-p polarization measurements	Setting up

P.L.A.

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
31 Jan - 2 Feb	RHEL	Proton Elastic and Inelastic Scattering from Mg^{24}
3 Feb	Imperial Coll.	Satellite Counter Testing
4 Feb	Birmingham Univ.	Detector Testing
5 Feb	RHEL Chemists	Isomer Ratio Experiment
6 Feb	RHEL Chemists	Production of Np^{234}

Internal Events

Mon., 31 Jan, 11.15 a.m. Lecture Theatre	Nimrod Lecture Series	Prof. W.J. Petržilka (Prague)	Differential and Integral Momentum Spectra of Secondary Particles in pion-nucleon Interaction at 7 GeV
Wed, 2 Feb, 12.40 p.m. Thurs, 3 Feb, 1.15 p.m. Lecture Theatre	Films	"Cybernetics" a 25 minute colour film and "Colours in Painting" a 15 minute colour film.	

The main film deals with the new science, Cybernetics, which explores the similarities and common laws of living beings and machines, the human nerve system and life-less automats. It was made in Hungary but has an English commentary. The supporting film,

"Colours in Painting", shows the development of the use of colours, in painting from the art of the Egyptians to the present time. Both films have been made available by courtesy of the British Hungarian Friendship Society.

Wed, 2 Feb Film "Radiation in Perspective" a requested repeat
11.30 a.m. Lecture showing of last weeks' film
Theatre.

External Events

Tues, 1 Feb, 7.30 p.m.: ASEE Reading and Districts Branch lecture on "Aspects of Electric Water Heating" at the East Berks College of Further Education, Boyne Hill Avenue, Maidenhead.

Wed, 2 Feb, 6 p.m. London W.C.1	IERE London Meeting	Dr. M.A. Champney	The Electron Beam in Electronics Research and Production
Thurs, 3 Feb. 4.15 p.m. Clarendon Lab. Oxford.	Theor. Phys. Seminar	Mr. J.A. Campbell	Radiative - Correction Algebra by Computer
Fri, 4 Feb, 4.15 p.m. Clarendon Lab. Oxford	Colloq.	Prof. R. Hofstadter (Stanford Univ. USA) at Stanford	Recent Results in Electron Scattering

I.E.E. Meetings: The following meetings will be held at the Institution of Electrical Engineers, Savoy Place, London, W.C.2 at 5.30 p.m. on the dates indicated:-

Electronics Division

Mon, 31 Jan.,	-	"The Definition and Properties of the Delta Function", lecture by R.F. Hoskins (AEI Ltd)
Tues, 1 Feb.,	-	"Common Mode Problems", discussion to be opened by R.B.D. Knight (Dynamco Inst. Ltd.)
Wed, 2 Feb.,	-	"Modern Applications of Closed-Circuits Television", lecture by V.J. Cooper (Marconi Co. Ltd.)

Power Division

Wed, 2 Feb.,	-	"Aspects of Power Station Layout that Facilitate Control of Operation", discussion to be opened by C.E. Pugh (CEGB Manchester)
Tues, 8 Feb.,	-	"The Origins of Load Losses in Induction Motors with Cast Aluminium Rotors", paper to be given by N. Christofides (Imp. Coll.)

Professional Groups

Mon, 31 Jan.,	-	"The Problems of Radiation Pressure and Associated Mechanical Forces", colloquium (at 10 a.m. and 2 p.m.)
Fri, 4 Feb.,	-	"The Physics of Circuit-Breaking", discussion opened by D.T. Swift-Hook (CEGB) and Prof. H. Edels, (Univ. of Liverpool)
Wed., 9 Feb,	-	"Computer Service Training", discussion.

Ordinary Group

Thurs, 3 Feb.,	-	"Electromagnetic Levitation", paper to be given by Prof. E.R. Laithwaite (Imp. Coll.).
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Mon, 7 Feb, 5 p.m., J.J. Thomson Phys. Lab. Reading.	Phys. Dept. Colloq	Prof. C.C. Butler (Univ. of Nottingham)	High Energy Physics - Recent Achievements and Future Prospects.
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A.E.R.E.

Tues, 1 Feb, 2 p.m. Conf. Rm. Bldg 8.9	Theor. Phys. Seminar	Prof. J.M. Ziman (Univ. of Bristol)	Wave Propagation through Distribution of Spheres. The Greenian Method
Thurs, 3 Feb, 2 p.m. Conf. Rm. Bldg 8.9	Applied Maths Gp Seminar	Dr. I.C. Pyle	Algebraic Manipulation in LISP
Thurs, 3 Feb 3.30 p.m. Conf. Rm. H.8	Nuclear Phys Colloq.	Prof. K.F. Smith (Univ. of Sussex)	Nuclear Magnetic Moments of Unstable Nuclei

Social News

RECORD PROGRAMME. 12.30 p.m. Tuesday 1 Feb Lecture Theatre

"Facade" by William Walton, with the poems, by Oswald Silwell, spoken by Edith Sitwell and Peter Pears.

CHRISTIAN FELLOWSHIPS. It has been decided to hold weekly meetings in future. Details will be given in the Bulletin each week, but the general pattern for the present will be: 1st Thursday in the month: Bible Study; 2nd Thurs: "Man in the Light of the Bible" - Series led by invited speakers; 3rd Thurs: Bible Study; 4th Thurs: Prayer Meeting; 5th Thurs: (if applicable); Special Meeting.

The next meeting will be on Thurs, 3 Feb, at 12.30 p.m. in the P.L.A. Conf. Rm. R.12, when Mr. Ray Powell of the Accounts Group will lead Bible Study on the Epistle of Titus, in continuation of last week's meeting. Further details from B.E. Kingdon, Bldg R.20 Ext 6297.

Rutherford Laboratory
28.1.66.

H.F. Norris Ext 484
Scientific Administration Gp
R.20