

Rutherford Laboratory Bulletin

No. 8/65
1 March 65

General News

VISITORS. The following visits will take place during the current week:-

Wed., 3 March:- Six final year students from the Department of Mechanical Engineering the University of Nottingham.

Thurs., 4 March:- Forty members of the Mathematics Society, Royal Holloway College.

Fri., 5 March: A party of students from the Grammar Technical School, Barry.

Sat., 6 March: A combined party of 25 students from Queen Mary College and 25 students from the North Gloucestershire Technical College.

OVERSEAS VISITS. Mr. J.C. Louth and Mr. H.C. Brooks to Brown Boveri, Baden, 1-6 March, to inspect proposed modifications to rectifiers.

POST-GRADUATE EDUCATION CENTRE. A series of six lectures on "Group Theory and Solid State Physics" will be given in the Post Graduate School by Dr. D.F. Johnston as an extension of his series on "Group Theory and Quantum Mechanics". These lectures will commence at 9.30 a.m. on 5, 12, 19, 26 March and 2, 9 April. Applications should be made through Division Heads to Mrs. M.C. Gould, Personnel Branch, Building R.20, Ext 575, from whom further details may be obtained. There is no closing date but applications should be made as early as possible.

Machine Schedules

P.L.A.

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
1-2 Mar		Maintenance
3-6 Mar	Kings College London	Elastic Scattering of Protons from Oxygen and Carbon (using the N_2^1 Analysing Magnet).
7-8 Mar	R.H.E.L. and Queen Mary College	(p,n) Reactions by Time-of-Flight Method.

Internal Events

Mon., 1 Mar., 11.15 a.m., Lecture Theatre.	Nimrod Lecture Series	Dr. D.V. Bugg (R.H.E.L.)	Proton-Proton and Proton-Neutron Total Cross Sections.
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Thurs., Fri., and Mon., 4, 5 and 8 March, at 9.30 a.m., Lecture Theatre. A series of three lectures on "Peripheral Processes in Fundamental Particle Physics", by Dr. A.C. Hearn of the Rutherford Laboratory. These lectures are for experimentalists and theoreticians and will trace the development of the peripheral model from its earliest application up to the present.

Wed., 3 Mar., 3.30 p.m.,
Thurs., 4 Mar., 10.30 a.m.
Lecture Theatre.

Film.

A 30 minute colour film on "Artificial Respiration". Dr. J.C. Evans, Medical Division, will introduce the film with a short talk on the subject.

Mon., 8 Mar.,
11.15 a.m., Lecture
Theatre.

Nimrod
Lecture
Series

Dr. R. Dowd
(Univ. of
Wisconsin)

τ Decay and the ϕ Meson and other
Decay Modes of the K^+ Meson.

Thurs., 11 Mar., 3.30 p.m.; Colloquium on "Photomultipliers and Photoelectric Devices", in conjunction with R.C.A., Conf. Rm., R.1; further details next week.

External Events

Thurs., 4 Mar.,
4.15 p.m., Clarendon
Lab., Oxford.

Theor
Phys.
Seminar

Dr. W. Opechowski
(British Columbia
and Lieden)

Magnetic Groups

Tues., 2 Mar.,
2.30 p.m., 21 Banbury
Rd, Oxford.

Nuclear
Phys.
Seminar

Dr. L. Goldfarb
(Manchester)

Stripping Reactions below
the Coulomb Barrier.

Fri., 5 Mar.,
4.15 p.m., Clarendon
Lab., Oxford.

Clarendon
Lab.
Colloq.

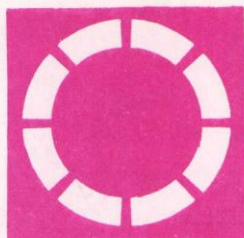
Prof. T.R. Carver
(Palmer Physics
Lab., Princeton,
U.S.A.)

Experiments Directed Towards
Large Nuclear Polarization of
 He^3 .

Social News

RECORD PROGRAMME. The record programme on Tuesday, 2 March is for the jazz enthusiast. The programme is called "Humph at the Conway" and is a recording made in 1954 of a live performance of Humphrey Littleton and his jazz band. This performance was completely impromptu and includes such numbers as, "That's the Blues, Old Man", a Johnny Hodges number, composed by Duke Ellington, "Mephis Shake", "Feline Stomp" by Johnny Parker and "I Double Dare You" which is one of Humph's own compositions. All are welcome at the Lecture Theatre, 12.30 p.m.

No. 9/65
5 March 65



Rutherford Laboratory Bulletin

General News

XEROX COPYING MACHINE. A second Xerox 914 copying machine has been installed in Reproduction Section, Building R.25 and will be operated by members of the section. Documents for copying on this machine should be sent to Reproduction in the usual way.

The Xerox machine in the library will in future be reserved for library users, except where special arrangements have been made.

EXTERNAL COURSES. The following courses will be held at the Borough Polytechnic, London, S.E.1 on the dates indicated:-

"Radiological Protection", a course of eight evening lectures commencing 29 April at 7.00 p.m.

"The Design, Use & Maintenance of Electronic Equipment used in Nuclear Physics", a two week Laboratory and lecture course, from 21 June to 2 July. An additional, optional preliminary course of one week from 14-18 June is also offered.

"Advanced Control Systems Technology" a proposed course of eight evening lectures, which will be given, if sufficient support is forthcoming, by D.R. Towill, Royal Military College of Science.

Further details of all the above mentioned courses may be obtained from Mrs. M.C. Gould, Personnel Branch, Building R.20, Ext 575.

THE INSTITUTION OF ELECTRICAL AND ELECTRONICS TECHNICAL ENGINEERS LTD. As was announced to A.S.E.E. members last month, the Board of Trade approved, on 15 January, the title, The Institution of Electrical & Electronic Technical Engineers Ltd for the new engineering society/qualifying body which the Association is sponsoring. A schedule of accepted educational qualifications can be seen on application to Mr. E.W. Clark, Building R.8 or H.F. Norris, Building R.20. Applications for membership will be accepted as from 1 April, 1965. If the names and addresses of all interested parties are given to Mr. Clark by 12 March, they will be sent together to the I.E.E.T.E. with a request for application forms.

ATTACHMENTS. Dr. P.J. Duke will be attached to the Institution of Theoretical and Experimental Physics, Moscow for a minimum period of six months commencing 19 March. He will be departing from the Rutherford Laboratory on 11 March. This is an exchange attachment and D.A. Suchkov, Senior Engineer of the Institution of Theoretical & Experimental Physics, Moscow, will be attached to the Rutherford Laboratory as from 9 March and will work on Spark Chamber Research.

OVERSEAS VISITS. Mr. K. Batchelor, to the U.S.A., 8-25 March, to attend the I.E.E.E. Conference on Particle Accelerators at Washington, 10-12 March. He will also visit the Accelerator Laboratories at Los Alamos, A.N.L., B.N.L. and Minnesota.

Mr. M.R. Harold, to the U.S.A., 9-25 March, to attend the I.E.E.E. Conference on Particle Accelerators at Washington, 19-12 March. He will also visit Berkeley and Brookhaven for discussions on beam instabilities and radiation problems arising from high intensity machines.

Mr. J.M. Dickson, to C.E.R.N., 10-13 March, to discuss progress on the injector design for the 300 GeV machine and future co-operation with the C.E.R.N. Group.

Mr. N.M. Fewell, to C.E.R.N., 10-14 March, for discussions with Mr. A. Carne (R.H.E.L.) and Mr. G. Dome (C.E.R.N.)

Machine Schedules

P.L.A

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
9-11 Mar	Maintenance	
12-17 Mar	U.C.L.	Measurement of proton-proton Differential Scattering Cross-Section.

Internal Events

Mon., 8 Mar., 11.15 a.m., Lecture Theatre	Nimrod Lecture Series	Dr. R. Dowd (Univ. of Wisconsin)	τ Decay and the ϕ Meson and other Decay Modes of the K^+ Meson.
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Thurs., 11 Mar., 2.30 p.m.; Colloquium on "Photomultipliers and Photoelectric Devices", in conjunction with R.C.A., Conf. Rm., R.1. The colloquium will be opened by Dr. R.W. Engstrom, R.C.A., Lancaster, N.J. Please note change of time from that given in last week's Bulletin.

Wed., 10 Mar., 1.0 p.m.	Film	"The Particle Hunters", a B.B.C. film from the "Eye on Research" series.
Thurs., 11 Mar., 1.15 p.m. Lecture Theatre		

Mon., 15 Mar., 11.15 a.m. Lecture Theatre	Nimrod Lecture Series	Dr. I.M. Blair (A.E.R.E.)	A Search for $\pi - \pi$ Resonant Behaviour in the Reaction $\pi^- + p$ $\rightarrow \pi^+ + \pi^- + n$ Near Threshold
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External Events

Thurs., 11 Mar., 4.15 p.m., Clarendon Lab., Oxford.	Theor Phys. Seminar	Prof. E.P. Wohlfarth (Imp. Coll.)	Some Aspects of the Band Theory of Magnetism.
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Fri., 12 Mar., 5.30 p.m., I.E.E., Savoy Place, London	Joint IEE/ IERE Discussion	The Training of the Computer Engineer	
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Institution of Mechanical Engineers. The Annual Meeting of the Branch will be held on Thursday, 11 March, 1965 at 7.30 p.m. at the Good Companions Hotel, Stoke Poges Lane, Slough.

Mon., 15 Mar., - Fri., 19 Mar., International Reprographic Exhibition, at Earls Court, London. Tickets may be available later. More details will be given in the next issue of the Bulletin.

A.E.R.E. Mon., 8 Mar., 9 a.m., Conf. Rm., Bldg. 8.9	Nuclear Phys. Colloq.	Mr. S.J. Cocking	Recent Work on the Nature of Liquids.
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Social News

A.E.R.E. CAMPING AND TOURING CLUB. A slide and cine evening is being held in the Lecture Theatre, R.H.E.L. on St. Patrick's Day, Wednesday, 17 March at 7.45 p.m. The programme will include coloured slides of the Club's camping activities at Henley Park Guildford; Southern Ireland; Norway and Sweden. There will also be a cine film of Switzerland, taken by a member of a camping tour last year. From the experience of a recent film show, presented by the Club, there may be a large audience, so be early to make sure of a seat.

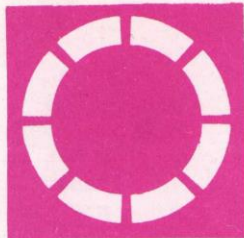
RECORD PROGRAMME. The programme for Tuesday, 9 March is devoted to Brahms Symphony No. 4 and will be of a performance by the Philharmonia Orchestra conducted by Bruno Walter. This recording was made about five years ago and is a very fine interpretation. This performance completes the series of Brahms' Symphonies.

CHRISTIAN FELLOWSHIP. The Group meets on the second and fourth Wednesday of each month in the P.L.A. Conference Room, Building R.12, from 1.00 p.m. to 1.30 p.m. The next meeting will be on 10 March, when Mr. Dennis Williams of the Atlas Laboratory will lead Bible Study on the First Epistle of John, Ch. 3, v.23—Ch. 4, v.6. Further details from B.E. Kingdon, Building R.20, Ext 6297.

FILM SHOW. Note the announcement in Internal Events above about the B.B.C. T.V. film, "The Particle Hunters" which will be shown on Wednesday and Thursday.

Rutherford Laboratory
5 March, 1965

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



Rutherford Laboratory Bulletin

No. 10/65
15 March 65

General News

NATIONAL ACADEMY OF SCIENCES AWARD. Mr. E.R. Harrison has been awarded a Senior Associateship by the National Academy of Sciences, Washington. He will be leaving the Rutherford Laboratory on 20 March to take up his appointment for a period of one year at the Goddard Space Flight Center, Greenbelt, Maryland, Washington.

ATTACHMENT. Mr. G.E. Gallagher-Daggitt of the P.L.A. Accelerator Physics Group is one one year's leave of absence commencing 11 March 1965. He will be working in the Particle Accelerator Division, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, Illinois.

A NIMROD EXPERIMENT ON T.V. A B.B.C. film unit visited the Laboratory in February. The resulting programme will be shown at 8 p.m. on Wednesday 17 March in the B.B.C.2 Horizon series. The title of the programme is "Forbidden Events" and Dr. N. Lipman talks about the recent work carried out at the Laboratory on the "forbidden" change of the elementary particle K_2^0 into two pions.

EXTERNAL COURSES. The following courses will be held at the Borough Polytechnic, London, S.E.1. on the dates indicated:-

"Basic Transistor Measurements", a laboratory course (eight meetings) commencing 4 May, from 9.30 a.m. to 12.30 p.m. each Tuesday.

"Introduction to Transistor Theory and Applications", a course of eight lectures will be given on Tuesdays, from 1.30 to 4.30 p.m. commencing 4 May.

Further details of the above mentioned courses may be obtained from Mrs. M.C. Gould, Personnel Branch, Building R.20, Ext 575.

CONFERENCE. The First International Conference on Medical Physics will take place at Harrogate, 8-10 September, 1965. The address for enquiries etc., is - The Secretary, The First International Conference on Medical Physics, 45-47 Little Britain, London E.C.1.

Machine Schedules

P.L.A.

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
15-17 Mar	U.C.L.	Measurement of proton-proton Differential Scattering Cross-Section.
18-21 Mar	Oxford Univ.	$C^{12} (p,p') C^{12} (p,d)$ Reaction Studies

Internal Events

Mon., 15 Mar., 11.15 a.m., Lecture Theatre	Nimrod Lecture Series	Dr. I.M. Blair (A.E.R.E.).	A Search for $\pi - \pi$ Resonant Behaviour in the Reaction $\pi^- + p \rightarrow \pi^+ + \pi^- + n$ Near Threshold
Wed., 17 Mar., 2 p.m., Conf. Rm., Building R.12.	P.L.A. Div. Seminar	Dr. J. Rouse (Melbourne Univ and R.H.E.L.)	The Melbourne University Variable Energy Cyclotron

External Events

Mon., 15 Mar., - Fri., 19 Mar., International Reprographic Exhibition, at Pauls Court, London. Tickets are now available from H.F. Norris, Scientific Administration, Building R.20, Ext 484. Details of some of the exhibits have been received and may be seen in Room 21, Building R.20.

Mon., 22 - Thurs., 25 March, 10 a.m.-6 p.m.: "The Lighting Exhibition" at the Royal Horticultural New Hall. A limited number of tickets are available.

In addition to the Exhibition, a series of conferences has been arranged by the British Lighting Council. Tickets for the conferences are free. Further information and tickets for the Exhibition may be obtained from H.F. Norris, Scientific Administration, Building R.20, Ext 484.

PHYSICS EXHIBITION. The 1965 Exhibition will be held in the Manchester College of Science and Technology from 5-8 April.

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., 15 Mar., - "Irreversible Effects Resulting from Breakdown in Transistors and Rectifiers", opened by C.F. Drake and A.F. Newal.

Tues., 16 Mar., - "Circuits with Periodically-Varying Parameters", opened by Prof. D.G. Tucker and D.P. Howson.

Mon., 22 Mar., - "Experimental Instrumentation in Scientific Satellites", by A.P. Willmore.

A.E.R.E.

Mon., 15 Mar., 9 a.m., Conf. Rm., Bldg. 8.9.	Nuclear Physics Colloq.	Dr. G. Manning	n-p Elastic Charge Exchange Scattering at 8 GeV/c.
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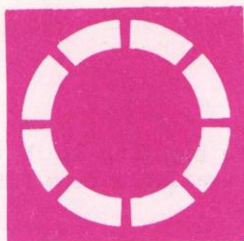
Data Display System: A Cathode Ray Tube Data Display system will be demonstrated in the Reactor School, Bldg., 455 on Wed., 31 March. The equipment will be demonstrated at hourly intervals from 9 a.m. to 4 p.m. and admission will be by ticket only, obtainable in advance from Miss E. Mitchell, Bldg. 531, Ext 5180.

Social News

RECORD PROGRAMME. Please note the change of date for the next record programme which will be given in the Lecture Theatre at 12.30 p.m. on Wednesday, 17 March. The programme consists of three works, opening with the Overture, "The Thieving Magpie" by Rossini. This is a sparkling overture in which the music moves with wit and vigour. It is followed by the Sibelius "Karelia Suite". This is early Sibelius, and evokes his youthful enthusiasm for the Finnish landscape. Finally there is a performance of the "Young Person's Guide to the Orchestra" by Britten which is a set of variations on a theme of Purcell. Starting with the highest pitched instrument of the orchestra, the piccolo, he introduces the flute, oboe, clarinet, strings, brass, percussion etc., each time individually illustrating their dynamic range. He then combines the instruments in a terrific climax which quietly fades to bring the work to its close.

Rutherford Laboratory
12 March, 1965.

H.F. Norris Ext 484



No. 11/65
22 March 65

General News

VISITORS. Thirty engineers attending the "Physics for Engineers" course at the Reactor School will visit the Laboratory on Friday, 26 March.

OVERSEAS VISIT. Mr. W.W. Woodall, General Administration, to C.E.R.N., 22-25 March for discussions with Rutherford Laboratory staff attached to C.E.R.N.

SYMPOSIUM. The Institute of Physics and the Physical Society announce a symposium on "Light Scattering by Small Particles" at 2 p.m. on Friday, 2 April at the H.H. Wills Physics Laboratory, University of Bristol. Members and others wishing to attend are asked to inform the Branch Honorary Secretary not later than Friday, 26 March. Further details from H.F. Norris, Building R.20, Ext 484.

Machine Schedules

P.L.A.

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
22-24 Mar		Maintenance
25-28 Mar	A.E.R.E.	Sn (p,d) Reaction Studies

Internal Events

Mon., 22 Mar., 11.15 a.m., Lecture Theatre	Nimrod Lecture Series	Dr. C.J.S. Damerell (Oxford Univ.)	A Spark Chamber Study of $\pi^- + p \rightarrow$ Non-strange Neutrals in the energy region $T_\pi \sim$ 2 GeV
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Mon., 22 Mar., 2.30 p.m., Atlas Lab. Conf. Rm.,	Informal Talk	Dr. Bernard Meltzer (Edinburgh Univ. and Atlas Lab.)	Theorem Proving for Computers
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This talk will be given in two parts, 2.30-3.30 p.m., (Interval for tea and biscuits), 3.50-4.40 p.m.

Tues., 23 Mar., 2.45 p.m., Lecture Theatre, - Film - "The Nimrod Vacuum Vessel" will be shown as an introduction to a short course on Vacuum technology. All are welcome to the showing of the film.

Wed., 24 Mar., 12.40 p.m., Thurs., 25 Mar., 1.15 p.m., Lecture Theatre.	Film	"The Story of Camp Century: City Under the Ice" An A.E.C. 32 minute colour film.
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This is a non-technical film telling the story of a unique undertaking. It covers the selection of the isolated camp site - 150 miles from Thule - the construction of 23 tunnels in the ice, the installation of the reactor, and the gradual activation to "criticality". Today, powered by its nuclear reactor, the arctic research centre is in full operation.

Mon., 29 Mar., 11.15 a.m., Lecture Theatre	Nimrod Lecture Series	Dr. P. March (Westfield College, London.)	New Data on Binding Energies of Hyperfragments.
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External Events

Mon., 22 -Thurs., 25 March, 10. a.m.-6 p.m.: "The Lighting Exhibition" at the Royal Horticultural New Hall. Tickets are still available from H.F. Norris, Scientific Administration, Building R.20, Ext 484.

Wed., 24 Mar., 2.30 p.m., Brunel Coll, London.	Electronics Colloq.	Mr. P. Wilde (R.H.E.L.)	Statistical (Monte Carlo) Design of Tunnel Diode Logic Circuits
Wed., 24 Mar., 6 p.m., 1 Birdcage Walk, London.	Inst. of Mech. Engrs. 11th Graham Clarke Lecture	Mr. J.C. Duck- worth (N.R.D.C. and Part-time Member UKAEA)	Incentives to Invention and Innovations
Wed., 24 Mar., 7.30 p.m., The Royal Oak, Woodstock Rd, Oxford.	A.S.E.E. Lecture	Mr. N.A. Tolken (Shell-Mex & B.P. Ltd.) and others	Oil-Fired Boiler Installations (All are welcome)
Wed., 31 Mar., 5.30 p.m., Kings Coll., London.	Inst. of Maths.Lecture	Mr. G.E. Felton (I.C.T. Ltd.) (open meeting - visitors welcome)	Thoughts on the Design of Digital Computers

I.E.E. MEETINGS: The following meetings will be held at the Institution of Electrical Engineers, Savoy Place, London, W.C.2 at the times and dates indicated:

Science and General Division. Colloquium on "Critical Path Analysis", Session 1 - 9.30 a.m.; Session 2 - 11.30 a.m.; Session 3 - 2 p.m.; Session 4 - 5.30 p.m. on Thursday, 25 March.

District Meeting - Reading. Lecture - "Recent Developments in Semiconductors", at 7.30 p.m., Monday, 22 March at the Great Western Hotel, Reading. The lecture will be given by Dr. R.C. Newman, J.J. Thompson Physical Laboratory, Reading.

District Meeting - Arborfield. Lecture - "The Linear Motor", at 5 p.m. on Thursday 25 March, in the Lecture Theatre, S.E.E., Hazebrouck Barracks, Arborfield. The lecture will be given by Prof. E.R. Laithwaite, Imperial College.

Social News

RECORD PROGRAMME. The programme for Tuesday, 23 March, is devoted to modern jazz and will concentrate on two aspects. The first is the work of the Modern Jazz Quartet, already familiar to people who regularly attend the record programmes. The selection of their music will include "Bluesology", which has fine solos by Milt Jackson and John Lewis, and other well known M.J.Q. works such as "Milano".

The second half of the programme will be the "Freedom Now" suite featuring the negro jazz drummer Max Roach. As the title suggests, the music is dedicated to the cause of negro integration.

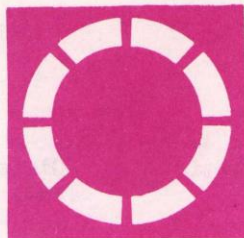
CHRISTIAN FELLOWSHIP. The next meeting of the Group will be on Wed., 24 March, 1.00-1.30 p.m., in the P.L.A. Conference Room, R.12, when the Rev. John Goodwin, Vicar of Merton, Bicester, and Editor of the World Christian Book Review, will talk on "Jesus Christ - His Incarnation". All are welcome. Further details from B.E. Kingdon, R.20, Ext. 6297.

Advance Notice: A special meeting will be held in the P.L.A. Conference Room on Wed., 31 March, 12.15-12.45 p.m., when Mr. G.V. Hammond, Organizing Secretary of the Workers' Christian Fellowship, will give an address on "Christian Witness in Industry". This address will be repeated in the Chapel, A.E.R.E. Social Club, 1.00-1.30 p.m. An evening meeting will also be held in the Chapel after working hours on this date. Further details will appear next week.

DARTS The Annual Darts Competition for teams of four will be starting in April. If you wish to enter a team please contact Bernard Keen, R.18, as soon as possible.

FILM SHOW. See "Internal Events" for details of the next film show, which will be given on Wednesday and Thursday. This is a non-technical film of general interest.

No. 12/65
29 March, 1965



Rutherford Laboratory Bulletin

General News

ATTACHMENT. Mr. H. Wroe of the Nimrod General Physics Group departs on 1 April for one years leave of absence. He will be working on Ion Source problems in the Proton Synchrotron Division, at Brookhaven National Laboratory, Long Island, New York.

VISITORS. Ten people from the Plymouth Technical College will visit the Laboratory on Wednesday, 31 March.

POST-GRADUATE EDUCATION CENTRE. Course No.3 on "Pulse Techniques for Nuclear Particle Counting" will be held at the Post-Graduate Education Centre School from 26-30 April. Applications should be made through Division Heads to Mrs. M.C. Gould, Personnel Branch, Building R.20, Ext 575, from whom further details may be obtained.

OVERSEAS VISIT. Mr. D.R. Moore of the Machine Engineering Group to Balzers, Furstentum, Liechtenstein, 1-3 April, to attend European meeting on Standardisation of High Vacuum Equipment.

Machine Schedules

P.L.A.

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
29 Mar.-1 April	A.E.R.E.	Sn(p,d) Reaction Studies
2-4 April	Oxford Univ.	Total Reaction Cross-sections

Internal Events

Mon., 29 Mar., 11.15 a.m., Lecture Theatre	Nimrod Lecture Series	Dr. P. March (Westfield College London)	New Data on Binding Energies of Hyperfragments
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There will be no lecture in the Nimrod Series on Monday 5 April

Wed., 31 Mar., 2 p.m., Conf. Rm., Bldg R.12.	P.L.A. Division Seminar	Dr. K. Bearpark (Oxford)	Measurement of Total Reaction Cross-sections
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External Events

29 Mar-2 April: 1965 Labex Exhibition, at Earls Court, London. Daily from 10 a.m.-6 p.m. except last day when exhibition closes at 4 p.m. A limited number of tickets should be available shortly from H.F. Norris Bldg. R.20, Ext 484.

Mon., 5 April 2.30 p.m., Savoy Place, W.C.2.	Joint IEE/ IERE Colloq.	Design of Real Time Computer Systems
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Thurs., 8 April, 7.15 p.m., The Ship Hotel, Duke St. Reading.	Inst. of Mech. Eng. Lecture	A Repetition by Dr. P.B. Walker, C.B.E., M.A., F.R. Ae.S., of his James Clayton Lecture, "The Scientific Investigation of Aircraft Accidents"
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A.E.R.E.

Wed., 31 Mar.,
2 p.m., Conf.
Rm., Bldg. 8.9

Theo
Phys
Seminar

Dr. M. Bolsterti
(Oxford Univ.)

Classification of Three-
Nucleon Wave Functions.

Social News

CHRISTIAN FELLOWSHIP. A special meeting will be held in the P.L.A. Conference Room on Wed., 31 March, 12.15-12.45 p.m. when Mr. G.V. Hammond, Organizing Secretary of the Worker's Christian Fellowship, will give an address on "Christian Witness in Industry". This address will be repeated in the Chapel, A.E.R.E. Social Club, 1.00-1.30 p.m. An informal evening meeting will also be held in the Chapel at 5.20 p.m., when there will be an opportunity for further discussion of topics raised during the day.

Advance Notice: The N.I.R.N.S. Group A.G.M. will be on Wed., 28 April at 1.00 p.m.

RECORD PROGRAMME. The programme for Tuesday, 30 March is entitled "Music from Vienna", and deals with two composers, Mozart and Schubert. Mozart wrote some delightful concertos for solo instruments and amongst these, the Horn Concertos have been particularly popular. The French Horn is one of the most difficult of the orchestral instruments to master. The soloist in the Horn Concerto No.3 is the late Dennis Brain who achieved an international reputation in his lifetime and was one of the finest Horn players the world has ever known.

Two of the worlds leading exponents of their particular craft can also be heard in the Schubert Lieder Recital. The German baritone Fischer Dieskau is well known in this country and is supported by the doyen of piano accompanist, Gerald Moore.

Rutherford Laboratory
26 March 65

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