

RUTHERFORD LABORATORY BULLETIN

No. 103, for the week commencing Monday, 7th January, 1963

VISITS ABROAD

✓ Mr. P. Bowles and Mr. G. N. Venn will visit C.E.R.N. on 6th-9th January, to discuss engineering support required for high energy experiments.

✓ Mr. R. N. Walker of the Engineering Design Group will visit Officine Galileo, Florence, on 6th-9th January, for discussions on vacuum systems.

P.L.A.

The programme scheduled for the P.L.A. during the current week is as follows:-

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
5th-7th Jan.	King's College, London.	Slit-Scattering Measurements.
8th-10th Jan.	Queen Mary College	Si ²⁹ (p-d) Asymmetry Meas.
11th-12th Jan.	Birmingham University	Double-Scattering Pol. Meas.

LECTURE COURSES

The following lecture courses will be held at the Laboratory:-

(i) A course of six lectures on Matrix Algebra, by Dr. J. Howlett, starting in February.

✓ (ii) A course of lectures on Accelerators, at a more advanced level than the current series. (The date for these has not yet been decided).

Anyone interested in these courses should contact Mr. T. R. Walsh, Building R.1, Ex. 438.

EXTERNAL COURSE

✓ A course of fifteen lectures on "Nuclear Radiation Detection and Measurement" will be held at the Borough Polytechnic, London S.E.1., on Wednesday evenings at 7 p.m., commencing 16th January. Details may be obtained from Mr. W. Burrells, Building R.1, Ext. 253, or Mr. P. Clare, Building R.20, Ext. 495.

CHANGE OF ADDRESS

Staff are asked to note that the Oxford University Nuclear Physics Department is now no longer a part of the Clarendon Laboratory. The correct address is:-

Department of Nuclear Physics, Nuclear Physics Laboratory,
21 Banbury Road, Oxford.

VACANCIES AT C.E.R.N.

✓ Further vacancy notices, covering a wide range of posts, have been received from C.E.R.N. Geneva. Details may be obtained from Mr. A. G. Taylor, Personnel Branch, Room 68, Building R.20.

INTERNAL EVENTS

Tues., 8th Jan., 5.30 p.m., Conf. Rm., Bldg. R.1.	"Fund. of Accelerators" Lect. Series.	Mr. A.J. Egginton	High Energy Beams I.
Thurs., 10th Jan., 5.30 p.m., Conf. Rm., Bldg. R.1.	Evening Lecture Series	Prof. H. Dingle (U.C.L.)	The Origin and Present State of Special Relativity.
Mon., 14th Jan., 11.15 a.m., Conf. Rm., Bldg. R.1.	Nimrod Lecture Series	Mr. L.B. Mullett (Postponed from 7th January).	Progress on Nimrod.

/Cont'd overleaf ...

EVENTS AT A.E.R.E.

Tues., 8th Jan., 2 p.m., Conf. Rm., Bldg. 8.9.	Theor. Phys. Seminar	Dr. R.G. Moorhouse (R.H.E.L.)	Pion-Pion Scattering.
Wed., 9th Jan., 2 p.m., Conf. Rm., Bldg. 220.	Chem. Div. Colloquium	Mr. G. J. Hunter	The Work of the Radio-Chemical Section at Woolwid Outstation. (Unclassified).

EXTERNAL EVENTS

7th-8th Jan: I.P.P.S. Conference on "Nuclear Interactions at Ultra-High Energies". At the H.H. Wills Physical Laboratory, University of Bristol.

Tues., 8th Jan., 5.30 p.m., Savoy Place, London W.C.2.	I.E.E. Lecture	Mr. R.E. Hayes	Cryogenics.
Tues., 8th Jan., 6.30 p.m., Univ. of Southampton.	I.E.E. Lecture	Mr. D. J. Truslove	Using a Digital Computer in Trans- istor Circuit Design.
Wed., 9th Jan., 7 p.m., S.E.B., 37 George St., Oxford.	I.E.E. Lecture	Mr. P.F. Gunning (C.E.G.B.)	Power Supply Control Systems (With films).
Wed., 9th Jan., 7.30 p.m., Coll. of Tech., Oxford.	Oxford Nat. Prod. Year Meeting	Mr. C. Beaver	Workers' Reaction to Productivity.
Mon., 14th Jan., 7.15 p.m., White Hart Hotel, Bloomsbury Sq., London W.C.1.	A.S.E.E. Lecture	Mr. D. W. Bird	Developments in Rubber and Plasti Cables.

14th-17th Jan: Exhibition of the Institute of Physics and the Physical Society. At the Horticultural Halls, Westminster, London S.W.1. (Tickets are available from B. E. Kingdon).

B. E. Kingdon
Scientific Administration

Building R.1,
7th January, 1963.

MAS

RUTHERFORD LABORATORY BULLETIN

No. 104, for the week commencing Monday, 14th January, 1963

VISITORS

✓ Dr. W. Kusch and Mr. C. Weychert of the Instytut Badan Jadrowych, Swierk, Warsaw, will visit the Laboratory on Monday, 14th January, for discussions on linear accelerators.

✓ A party of approximately seventeen post-graduate students from Battersea College of Technology will visit the Laboratory on Monday, 14th January.

VISITS ABROAD

✓ Dr. J. Howlett, Director of the Atlas Computer Laboratory, will visit Amsterdam and Delft, Holland, on 16th-23rd January, to give a talk at a meeting of the Dutch Computer Society and to visit the Philips' Rekencentrum.

P.L.A.

The programme scheduled for the P.L.A. during the current week is as follows:-

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
14th Jan.	(Accelerator Physics)	
19th Jan. (till noon)	-	Chemists' Irradiation
19th-21st Jan.	Birmingham University	Double-Scattering Polarization Measurements

CONFERENCES

The Institute of Physics and the Physical Society will hold the following meetings on the dates indicated:-

Conference on "Sorpton Properties of Vacuum Deposited Metal Films"
(17th-19th April, 1963).

✓ Symposium on "Education in Vacuum Science and Technology" (29th May, 1963).

Conference on "High Magnetic Fields, their Production and their Applications"
(10th-12th July, 1963).

Conference on "Plasma Physics" (24th-27th September, 1963).

Details of the above events may be obtained from B. E. Kingdon, Building R.1, Ext. 484.

INTERNAL EVENTS

Mon., 14th Jan., 11.15 a.m., Conf. Rm., Bldg. R.1.	Nimrod Lecture Series	Mr. L. B. Mullett (Postponed from 7th January)	Progress on Nimrod.
Tues., 15th Jan., 5.30 p.m., Conf. Rm., Bldg. R.1.	Fundamentals of Accelerators Lecture Series	Mr. A. J. Egginton	High Energy Beams II.
Thurs., 17th Jan. 5.30 p.m., Conf. Rm., Bldg. R.1.	Evening Lecture Series	Mr. W. Walkinshaw	End Points in Accelerators.
Mon., 21st Jan., 11.15 a.m., Conf. Rm., Bldg. R.1.	Nimrod Lecture Series	Dr. J. A. Newth (Imperial Coll.)	An Experiment to Study the ω^0 Resonance using Spark Counters at Nimrod.

(continued overleaf)

EVENTS AT A. E. R. E.

A course of approximately twelve lectures on "Topics in Applied Mathematics" will be held on Tuesdays and Thursdays at 9 a.m. in the Theoretical Physics Conference Room, Building 8.9, starting on Tuesday, 15th January.

Thurs., 17th Jan., 2 p.m., Cockcroft Hall. (No passes reqd.)	Culham Laboratory Colloquium	Mr. T. E. Stringer	Low-frequency Plasma Waves.
--------------------------------------------------------------------	------------------------------------	--------------------	--------------------------------

EXTERNAL EVENTS

14th-17th Jan: Exhibition of the Institute of Physics and the Physical Society. At the Horticultural Halls, Westminster, London S.W.1. (Tickets are available from B. E. Kingdon).

Mon., 14th Jan., 5.30 p.m., Savoy Place, London W.C.2.	I.E.E. Lecture	Mr. J. Thompson	Modern Transducers with an Electrical Output.
Tues., 15th Jan., 7.30 p.m., Employ- ment Exchange, Oxford.	A.S.E.E. Lecture	Staff of Walsall Conduits Ltd.	Flameproof Installations.
Wed., 16th Jan., 5.30 p.m., Savoy Place, London W.C.2.	I.E.E. Lecture	Mr. K. Hoselitz	Masers.
Wed., 16th Jan., 7.15 p.m., Great Western Hotel, Reading.	I.E.E. Lecture	Mr. C. F. Booth	Telstar.
Mon., 21st Jan., 7.30 p.m., Coll. of Tech., Oxford.	Oxford Nat. Prod. Year Mtg.	Mr. N. E. Sherlock (Kodak Ltd.)	Film: Photography at Work.
Tues., 15th Jan., 2.30 p.m., 21 Banbury Road, Oxford.	Nuclear Physics Seminar	Dr. John Manley (Los Alamos Laboratory)	He ³ ,n Reactions.

Building R.1
Rutherford Laboratory

B. E. Kingdon

11th January, 1963.

RUTHERFORD LABORATORY BULLETIN

No.105, for the week commencing Monday, 21st January, 1963

HYDROGEN BUBBLE CHAMBER

The British National Hydrogen Bubble Chamber commenced cycling, and the first track photographs were obtained, early on Thursday morning, 17th January.

VISITS ABROAD

Dr. A. M. Segar of the High Energy Physics Group left for C.E.R.N. on 16th January to complete an experiment on the C.E.R.N. proton synchrotron.

ATTACHED STAFF

Mr. R. J. Burleigh, who has been attached to the Cyclotron Group for the past ten months, will return to U.C.R.L., Berkeley, California, on 25th January.

P.L.A.

The programme scheduled for the P.L.A. during the current week is as follows:-

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
21st Jan.	Birmingham University	Double-Scattering Polarization Measurements.
22nd-23rd Jan.	N.I.R.N.S.	Proton-Proton Scattering.
24th-26th Jan.	Oxford University	Cross-Section Measurement, N15 (p, γ).

LIBRARY NOTICE

The following book has been reported missing from the Library, Building R.1:-

COLMAN, H.L. and SMALLWOOD, C. : Computer Language.
An auto-instructional introduction to Fortran. (Ha 34651)

INTERNAL EVENTS

Mon., 21st Jan., 11.15 a.m., Conf. Rm., Bldg.R.1	Nimrod Lecture Series	Dr. J. A. Newth (Imperial Coll.)	An Experiment to Study the ω^0 Resonance using Spark Counters at Nimrod.
Mon., 28th Jan., 11.15 a.m., Conf. Rm., Bldg.R.1	Nimrod Lecture Series	Dr. J. Thresher	A Study of K^-p Interactions using Spark Chambers.
(The Tuesday Evening Lecture Series on "Fundamentals of Accelerators" is now concluded. There will be no lecture in the Thursday Evening Series on 24th January).			
Thurs., 31st Jan., 5.30 p.m., Conf. Rm., Bldg.R.1	Evening Lecture Series	Dr. T. G. Pickavance	Manpower, Money and Politics in High Energy Physics.

EVENTS AT A.E.R.E.

Tues., 22nd Jan., 2 p.m., Conf. Rm., Bldg.8.9	Theor. Physics Seminar	Mr. B. E. Cooper	Finding New Statistical Criteria.
Thurs., 24th Jan., 11 a.m., Conf. Rm., Bldg.351.15	Chem. Eng. Division Colloquium	Mr. J. Maitland-Edwards (Ministry of Education)	Trends in Technological Education.
Thurs., 24th Jan., 2 p.m., Cockcroft Hall. (No passes reqd.)	Culham Laboratory Colloquium	Dr. D. F. Jephcott and Dr. L. C. Woods	Hydromagnetic Waves: Theory and Experiment.

/cont'd over

EXTERNAL EVENTS

Tues., 22nd Jan., 5 p.m., I.E.E., Savoy Place, London W.C.2.	Inst. P.O. Elec. Engrs. Lecture	Mr. A. F. G. Allan	Developments in Small Diameter Coaxial Cables.
Wed., 23rd Jan., 2 p.m., Culham Laboratory.	Theor. Physics Seminar	Dr. T. J. M. Boyd	Radiation by Plasma Oscillations.
Wed., 23rd Jan. : Brit. I.R.E. Symposium on "The Use of Tunnel Diodes as Storage and Switching Elements". 2.30 p.m. at the London School of Hygiene and Tropical Medicine, W.C.1. (Non-members should obtain tickets from the Institution).			
Wed., 23rd Jan., 7 p.m., Coll. of Sc. and Tech., Bristol.	Brit. I.R.E. Lecture (Non-members should contact B. E. Kingdon).	Dr. I. R. Young	Digital Instruments for Instrumentation.
Fri., 25th Jan., 4.15 p.m. Clarendon Lab., Oxford.	Physics Colloquium	Prof. R. W. Ditchburn (Reading University)	Information and Control in the Visual System.
28th-31st Jan. : Industrial Safety Exhibition and Conference. Central Hall, Westminster, London S.W.1.			

Building R.1,
Rutherford Laboratory.

B. E. KINGDON

18th January, 1963

RUTHERFORD LABORATORY BULLETIN

No. 106, for the week commencing Monday, 28th January, 1963

VISITS ABROAD

Dr. D. J. Thompson of the Nimrod R.F. Group left on 23rd January for a tour of various accelerator laboratories in the United States. Mr. K. W. Tarry also leaves for the United States on 2nd February to visit a number of firms in connection with R.F. problems. He will return with Dr. Thompson on 17th February.

Dr. E. Pickup of the Bubble Chamber Group left for C.E.R.N. on 23rd January to participate in a bubble chamber experiment on K^- mesons. He is expected to return at the end of February.

Mr. A. G. Wilson of the Theoretical Physics Group and Mr. J. M. Scarr of the Bubble Chamber Group will visit the Ecole Polytechnique, Paris, from 28th to 31st January, to attend a meeting on the T.8 Bubble Chamber Experiment.

Mr. H. Hadley and Mr. A. T. Gresham of the Central Engineering Group will visit the Oerlikon Engineering Company, Zürich, from 29th January to 1st February, to discuss the design of various magnets for Nimrod beam extraction and handling equipment.

Mr. H. R. Mc K. Hyder of the Electrostatic Generator Group will visit the High Voltage Engineering (Europa) Co. at Amersfoort, Holland, from 30th January to 2nd February, in connection with the Oxford electrostatic generator project.

Mr. J. J. Hughes of the Inspection and Progress Department will visit A.C.E.C., Brussels, from 31st January to 2nd February to discuss the manufacturing programme for the Heavy Liquid Bubble Chamber magnet.

P.L.A.

The programme scheduled for the P.L.A. during the current week is as follows:-

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
31st Jan. (6 a.m.)	(Chemists' Irradiation - A.E.R.E.)	
31st Jan. (8 a.m.) - 1st Feb.	A.E.R.E.	Differential Cross-Section Measurements.
2nd-3rd Feb.	N.I.R.N.S.	Proton-Proton Scattering.

LECTURE COURSE

The course of six lectures on Matrix Algebra to be given by Dr. J. Howlett will be held on Tuesdays, commencing 12th February. Copies of the provisional syllabus may be obtained from Mr. T. R. Walsh, Room 2.81, Building R.1, Ext. 438.

SYMPOSIUM

A symposium on "Transient, Fluctuating and Distorting Loads, and their Effect on Power Systems and Communications" will be held on 25th and 26th February by the Institution of Electrical Engineers, at Savoy Place, London W.C.2. Details and application forms may be obtained from B. E. Kingdon, Building R.1, Ext. 484.

CHANGE OF ADDRESS

Staff are reminded that all matters concerning the A.E.I. range of Laboratory Electronic Equipment and Educational Aids are now being undertaken from: Associated Electrical Industries Limited, Telecommunications Division, Transmission Department, Woolwich, London S.E.18.

FIRST AID LECTURES

A two-lecture course, covering the essentials of First Aid, will be held on Wednesdays, 6th and 13th February, in the Cockcroft Hall at 7.30 p.m. (Outer gate open). Anyone is welcome to attend one or both lectures, which will be given by a Medical Officer, and no obligations will be incurred by attending.

/cont'd over

INTERNAL EVENTS

Mon., 28th Jan., 11.15 a.m., Conf. Rm., Bldg. R.1.	Nimrod Lecture Series	Dr. J. Thresher	A Study of $K^- - p$ Interactions using Spark Chambers.
Thurs., 31st Jan., 5.30 p.m., Conf. Rm., Bldg. R.1.	Evening Lecture Series	Dr. T. G. Pickavance	Manpower, Money and Politics in High Energy Physics.
Mon., 4th Feb., 11.15 a.m., Conf. Rm., Bldg. R.1.	Nimrod Lecture Series	Dr. P. Murphy	A Proposal to Measure $\pi^- - p$ Polarization near 900 MeV/c at Nimrod.

EVENTS AT A.E.R.E.

Mon., 28th Jan., 9 a.m., Conf. Rm., Bldg. 8.9	Theoretical Physics Division Information Meeting. All Computer users are invited to attend.		
Mon., 28th Jan.:	Film, "The Nature of Glass", by the Corning Glass Company. (Duration 40 minutes).	11.30 a.m. in the Cockcroft Hall.	(No passes required).
Tues., 29th Jan., 2 p.m., Conf. Rm., Bldg. 8.9.	Theor. Physics Seminar	Dr. R. J. N. Phillips	Regge Pole Models for High Energy Scattering.

EXTERNAL EVENTS

Tues., 29th Jan., 2.30 p.m., Imperial College, London.	Theor. Physics Seminar	Dr. P. G. Burke (A.E.R.E.)	Pion-Pion Scattering in the Strip Approximation.
Thurs., 31st Jan., 2.30 p.m., Cavendish Lab., Cambridge.	Theor. Physics Seminar	Dr. R. G. Moorhouse (R.H.E.L.)	Calculations on the $\pi - \pi$ Interaction.
Thurs., 31st Jan., 2.30 p.m., Clarendon Lab., Oxford.	Low Temp. & S.S. Physics Colloquium	Dr. W. P. Wolf	Garnets - Ideal Magnetic Materials?
Fri., 1st Feb., 3 p.m., Cavendish Lab., Cambridge.	Theor. Physics Seminar	Mr. M. S. Oakes	Towards a Geometrisation of Electrodynamics.
Fri., 1st Feb., 3.30 p.m., University College London.	Theor. Physics Seminar	Dr. W. N. Cottingham (Birmingham University)	The Proton-Neutron Mass Difference.
Fri., 1st Feb., 4.15 p.m., Clarendon Lab., Oxford.	Colloquium	Dr. T. E. Cranshaw (Nuclear Physics Div., A.E.R.E.)	Statics and Dynamics.

B. E. KINGDON

Building R.1,
Rutherford Laboratory.

25th January, 1963.

CMP

RUTHERFORD LABORATORY BULLETIN

No. 107, for the week commencing Monday, 4th February, 1963

VISITS ABROAD

Mr. J. T. Delury and Mr. E. G. Higgins of the Central Engineering Group will visit C.E.R.N. from 2nd to 16th February and 5th to 9th February respectively, for discussions on engineering problems, particularly those relating to beam handling equipment.

P.L.A.

The programme scheduled for the P.L.A. during the current week is as follows:-

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
4th - 10th Feb.	N.I.R.N.S.	Proton-Proton Scattering.

LECTURES

The series of five lectures on "Electrical Breakdown in Vacuum", postponed from 6th and 7th December, will now be held at the Laboratory on Thursday, 7th and Friday, 8th February. The lectures will be given by Mr. R. Hawley, Dr. R. Craik and Mr. A. Maitland of the C.A. Parsons Nuclear Research Centre, Newcastle-upon-Tyne, and Dr. P. A. Chatterton of the Rutherford Laboratory. Staff not already notified, who may wish to attend, are asked to contact B. E. Kingdon, Ext. 484, from whom further details may be obtained.

INTERNAL EVENTS

Mon., 4th Feb., 11.15 a.m., Conf. Rm., Bldg. R.1	Nimrod Lecture Series	Dr. P. Murphy	A Proposal to Measure π^- -p Polarization near 900 MeV/c at Nimrod.
*Thurs., 7th Feb., 5.30 p.m., Conf. Rm., Bldg. R.1	Evening Lecture Series	Dr. T. E. Cranshaw (A.E.R.E.)	Statics and Dynamics.
Mon., 11th Feb., 11.15 a.m., Conf. Rm., Bldg. R.1	Nimrod Lecture Series	Messrs. R. G. T. Bennett, A. J. Egginton and D. A. Gray	Nuclear Physics Facilities on Nimrod.

*(Repeat of Dr. Cranshaw's lecture given at the Clarendon Laboratory on 1st Feb.)

EVENTS AT A.E.R.E.

Thurs., 7th Feb., 2 p.m., Cockcroft Hall (No passes reqd.)	Culham Laboratory Colloquium	Prof. D. Gabor (Imperial College)	Investigations on a New Thermonuclear Scheme.
Thurs., 7th Feb., 5.45 p.m., Reactor School.	A.S.E.E. Lecture	Staff of Sangamo Weston Ltd.	The Uses of Electrical Measuring Instruments.

EXTERNAL EVENTS

Wed., 6th Feb., 4.30 p.m., University College London.	Physics Department Seminar	Dr. J. B. Hasted	The Uses of Quadrupole Fields.
Fri., 8th Feb., 4.15 p.m., Clarendon Lab., Oxford.	Physics Colloquium	Dr. P. H. Fowler (H. H. Wills Physics Lab., Bristol)	Nuclear Interactions at Super-high Energies.
Fri., 8th Feb., 4.30 p.m., J.J.Thomp- son Phys. Lab., Reading.	Physics Department Colloquium	Mr. L. J. Bentall (Elliott Brothers)	Design of a Computer with Special Reference to the Elliott 803.

RUTHERFORD LABORATORY BULLETIN

No. 108, for the week commencing Monday, 11th February, 1963

VISITS ABROAD

✓ Mr. A. J. Egginton of the Nimrod Beam-Handling Group will visit C.E.R.N. on 11th and 12th February for discussions on particle yield experiments.

✓ Mr. R. Carr of the High Energy Physics (Engineering) Group will visit C.E.R.N. from 17th to 24th February to study the design of high energy physics equipment used with the C.E.R.N. proton synchrotron.

(Correction: Mr. J. T. Delury was incorrectly described as a member of the Central Engineering Group in last week's Bulletin, in connection with his visit to C.E.R.N. He is in fact a member of the High Energy Physics (Engineering) Group.)

NIMROD MAGNET POWER SUPPLIES

✓ On Monday, 28th January the complete twin motor-alternator-flywheel set feeding the convertor plant was used to pulse eight magnet octants for the first time. After thoroughly ageing the convertor plant, the magnet was pulsed at full voltage and at 10,500 amps for the first time on Friday, 1st February. Since then the plant has operated on occasions at maximum repetition rates at 10,500 amps magnet current during commissioning tests.

P.L.A.

The programme scheduled for the P.L.A. during the current week is as follows:-

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
14th Feb. (6 a.m.)	(Chemists' Irradiation - A.E.R.E.)	
14th Feb. (8 a.m.) - 18th Feb.	Queen Mary College	"A" Parameter Polarization Measurement.

INTERNAL EVENTS

Tues., 12th Feb., 4 p.m., Conf. Rm. No. 4, Bldg. R.1.	Lecture Series	Dr. J. Howlett (First of a series of six lectures)	Matrix Algebra I
Thurs., 14th Feb., 5.30 p.m., Conf. Rm., Bldg. R.1.	Evening Lecture Series	Dr. F.J.P. Clarke, (Metallurgy Div., A.E.R.E.)	Why Materials are Brittle.
Mon., 18th Feb., 11.15 a.m., Conf. Rm., Bldg. R.1.	Nimrod Lecture Series	Dr. W. Galbraith and Dr. G. Manning	Proposals for p-p and n-p Experiments at Nimrod.
Tues., 19th Feb., 3 p.m., Conf. Rm., Bldg. R.1.	Special Lecture	Dr. L. Van Hove (C.E.R.N.)	Inelastic Collisions at Very High Energies.

B. E. Kingdon

Building R.1,
Rutherford Laboratory

11th February 1963

MAS

RUTHERFORD LABORATORY BULLETIN

No. 109, for the week commencing Monday, 18th February, 1963

VISITORS: Dr. L. Van Hove, Head of Theoretical Physics at C.E.R.N., will visit the Laboratory on Tuesday, 19th February for discussions with Mr. Walkinshaw. (See also "Internal Events" below).

Press representatives have been invited to the Laboratory on Friday, 22nd February, to see the British National Hydrogen Bubble Chamber prior to its shipment to C.E.R.N.

P.L.A.: The programme scheduled for the P.L.A. during the current week is as follows:-

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
18th Feb.	Queen Mary College	"A" Parameter Polarization Measurement.
19th-23rd Feb.	King's College, London	Slit-Scattering Measurements.

CONFERENCE: The Institute of Physics and the Physical Society will hold a Conference on "Low and Medium Energy Nuclear Physics" at the University of Manchester on 4th-6th September, 1963. Advance registration is necessary. Short contributed papers are invited. Further details may be obtained from B. E. Kingdon, Building R.1, Ext. 484.

INTERNAL EVENTS

Mon., 18th Feb., 11.15 a.m., Conf. Rm., Bldg. R.1.	Nimrod Lecture Series	Dr. W. Galbraith and Dr. G. Manning	Proposals for p-p and n-p Experiments at Nimrod.
Tues., 19th Feb., 9.30 a.m., Conf. Rm. No. 4, Bldg. R.1.	Lecture Series	Dr. J. Howlett (Please note the new time for this lecture)	Matrix Algebra II.
Tues., 19th Feb., 3 p.m., Conf. Rm., Bldg. R.1.	Special Lecture	Dr. L. Van Hove (C.E.R.N.)	Inelastic Collisions at Very High Energies.

(Part of the lecture will be devoted to present thinking for extending the energy range beyond that of existing accelerators).

19th, 20th and 21st Feb.: Safety Film "Static Electricity." (Duration 30 minutes). 10.45 a.m. in the Main Conference Room, Building R.1.

Thurs., 21st Feb., 5.30 p.m., Conf. Rm., Bldg. R.1.	Evening Lecture Series	Dr. F. A. Vick (Director, A.E.R.E.)	The Relationship between Universities and Government.
Mon., 25th Feb., 11.15 a.m., Conf. Rm., Bldg. R.1.	Nimrod Lecture Series	Dr. R. Phillips (A.E.R.E.)	Regge Phenomenology.
Mon., 25th Feb., 2 p.m., Conf. Rm., Bldg. R.1.	Informal Talk	Dr. N. A. Barricelli (Vanderbilt Univ., Massachusetts)	Numerical Evolution.

(A description of work done on the Manchester "Atlas" Computer in relation to artificial intelligence).

EXTERNAL EVENTS

Wed., 20th Feb., 2 p.m., Bldg. D.2, Culham Lab.	Theoretical Physics Seminar	Dr. F. A. E. Pirani (King's College, London)	Physical Ideas underlying Gravitational Radiation Theory.
Wed., 20th Feb., 4.30 p.m., University College London.	Physics Department Seminar	Professor E.H.S. Burhop (U.C.L.)	Future High Energy Machines.
Fri., 22nd Feb., 4.15 p.m., Clarendon Lab., Oxford.	Colloquium	Dr. G. B. Chadwick (Oxford University)	Experiments at C.E.R.N.