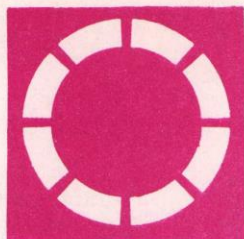


No. 21/65
7 Jun 65



Rutherford Laboratory Bulletin

General News

VISITORS. Professor F. Perrin, High Commissioner of the French Atomic Energy Commission, will visit the Laboratory on Wednesday, 9 June.

A party of 25 students from Faraday House Engineering College will visit the Laboratory on Wednesday, 9 June.

30 members of the Bracknell Science and Engineering Society will visit the Laboratory on Saturday, 12 June.

OVERSEAS VISITS. Dr. P.G. Murphy will attend the International Symposium on Electron and Photon Interactions at High Energies, to be held at Hamburg on 8-12 June.

Mr. H. Hadley will visit CERN on 11-15 June for discussions with the A.R. Division, concerning power supplies for the proposed CERN storage ring project.

B.B.C. RADIO - Third Programme. The two-part feature entitled "Elementary Particles", which was previously broadcast on 19 May, will be repeated on Friday, 11 June, commencing at 8.10 p.m. After a short break at 9.20 p.m., the second part continues at 9.35 p.m. A number of eminent high energy physicists are taking part.

Machine Schedules

P.L.A.

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
7-13 June	Birmingham Univ.	Polarization Studies at 50 MeV.

Internal Events

Thurs., 10 June, 2.30 p.m., Atlas Lab. Conf. Room.	Informal Talk	Dr. A.O.L. Atkin	Application of Computing to the Coefficients of Modular Forms.
--	------------------	------------------	--

There will be no Nimrod Lecture on Monday, 7 June. Details of the lecture to be given on 14 June will appear in the next issue of the Bulletin.

Mon., 14 June, 2.15 p.m., Lecture Theatre	Nimrod Proposals for Experiments	Dr. B.G. Duff (U.C.L.)	A Proposal to Measure the Differential Cross-Section of K ⁻ -p Elastic Scattering in the Momentum Range 850 to 2,200 MeV/c.
---	--	---------------------------	--

Monday, 14 June: Visit of Mobile Demonstration Laboratory of electronic equipment by Messrs. Hewlett-Packard Ltd., adjacent to Building R.20. (Times of opening and closing will be given in next week's Bulletin). Details of the equipment to be shown may be seen in Room 21, Building R.20.

Wed., 16 June 2.15 p.m., Lecture Theatre	Talk on NINA (No. 1)	Mr. M.C. Crowley- Milling (D.N.P.L.)	General outline of project. Details of machine physics, injector, extraction, magnet and magnet power supply.
--	----------------------------	---	--

(This is the first of a series of three talks, designed for technical but non-specialist audiences. The remaining talks will be given at the same time on 23 and 30 June. Please note change of dates).

External Events

Tues., 8 June 2.30 p.m., 21 Banbury Rd, Oxford.	Nuclear Physics Seminar	Mr. D.K. Scott (Oxford Univ.)	Inelastic Proton Scattering Experiments with the P.L.A.
Wed., 9 June, 5 p.m., Dept of Astrophysics, Oxford.	Colloquium	Dr. J.V. Jelley (A.E.R.E.)	Astrophysical Problems of Cosmic Rays
Thurs., 10 June, 4.15 p.m., Clarendon Laboratory, Oxford.	Theoretical Physics Seminar	Prof. R.H. Dalitz	Mass Splittings in Resonance States
Fri., 11 June, 4.15 p.m., Clarendon Laboratory, Oxford.	Colloquium	Prof. D.H. Perkins (Bristol Univ.)	Neutrinos

15-19 June: 1st Noise and Vibration Reduction Exhibition, at Earls Court.
16-26 June: International Plastics Exhibition (Interplas), at Olympia.

Social News

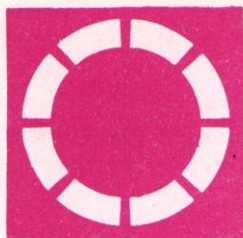
OPEN DAY BALL: Saturday, 19 June. Dancing to the professional tunes of Sid Wagstaff and his Music, 7.45 p.m.-Midnight in the Laboratory Restaurant, Fully licensed Bar, Grill and Buffet. Spot prizes! Tickets 7/6 each, obtainable from Eric Kirby, Electricians, R.18; Ron Hecken, Chemistry Lab., R.8; or from all L.A.O.s.

CHRISTIAN FELLOWSHIP. The next meeting of the Group will be on Wednesday, 9 June, 1.00-1.30 p.m., in the P.L.A. Conference Room, R.12, when the Rev. Arthur Wainwright of All Saints Methodist Church, Abingdon, will speak on "The Work of the Holy Spirit". All are welcome. Further details from B.E. Kingdon, R.20, Ext 6297.

Rutherford Laboratory
4 June, 1965

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

No. 22/65
14 June 65



Rutherford Laboratory Bulletin

General News

BURSARIES Applications are invited for awards under the Royal Society and Nuffield Foundation Commonwealth Bursaries Scheme, beginning during the period January-June 1966. The closing date for applications is 15 September, 1965. Details may be obtained from H.F. Norris, Scientific Administration, Bldg R.20 Ext 484.

COURSES. The Northampton College of Advanced Technology, London have announced details of the following courses, all of which commence on 20 September, 1965.

Postgraduate Diploma Course in Instrument Design
Postgraduate Course in Instrument and Control Engineering
Postgraduate Diploma Course in Production Engineering.

Further details from H.F. Norris, Bldg R.20, Ext 484.

CONFERENCE. A residential conference will be held at the University of Birmingham on "The State of the Art in Numerical Analysis", 18-21 July 1965. Further details and forms of application from The Registrar, The Institute of Mathematics and its Applications c/o Imperial College, South Kensington, London S.W.7.

Machine Schedules

P.L.A.

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
14 June	Birmingham Univ.	Polarization Studies at 50 MeV
15-16 June		Maintenance
17-21 June	RHEL and Queen Mary College	Measurement of the Polarization of Neutrons from the $\text{Li}^7(p,n)\text{Be}^7$ Reactions at 50 MeV.

NIMROD 2 GeV operation - Cycle 3 (16.6.65.-28.6.65.)

Machine Physics
Extraction Studies (External proton beam)
High Energy Physics.

<u>Team</u>	<u>Beam</u>	<u>Experiment</u>	
AERE/Queen Mary College	P6	p-p inelastic scattering	Setting up
Hydrogen Bubble Chamber Collaboration	K1	p-d and π^+ -d scattering	Data
Imperial College	$\phi 1$	A study of the $\phi \rightarrow e^+e^-$ decay	Setting up
UCL/Bristol Univ.	P3X	Study of the η^0 meson	Setting up
AERE/Southampton/UCL	P3	Study of the $\pi^- + p \rightarrow \begin{cases} n + x \\ p + x \end{cases}$ processes	Setting up

Internal Events

Mon., 14 June, 11.15 a.m. Lecture Theatre	Nimrod Lecture Series	Prof. R.F. Mozley (Stanford Univ.)	Experimental High Energy Physics at Stanford
Mond., 14 June, 2.15 p.m., Lecture Theatre	Nimrod Proposals for Experiments	Dr. B.G. Duff (U.C.L.)	A Proposal to Measure the Differential Cross-Section of K ⁻ p Elastic Scattering in the Momentum Range 850-2,200 MeV/c
Wed., 16 June, 2.15 p.m., Lecture Theatre	Talk on NINA (No.1)	Mr. M.C. Crowley- Milling (DNPL)	General Outline of Project. Details of Machine Physics, Injector, Extraction, Magnet and Magnet Power Supply.
Mon., 21 June, 11.15 a.m., Lecture Theatre	Nimrod Lecture Series	Dr. J. Dowell (Birmingham Univ).	Search for Hyperon Resonances using Spark Chambers.
Atlas Lab.			
Wed., 16 June, 2.30 p.m., Atlas Lab., Conf. Rm.	Talk	Paul Constantinescu Clustering Problem with (Univ. of Bucharest) Applications in Psychology. and Peter Stringer (Bath Academy of Art)	

External Events

Tues., 15 June, 2.30 p.m., 21 Banbury Rd, Oxford	Nuclear Physics Seminar	H. Muirhead (liverpool)	Experiments with the Liverpool Cyclotron
Thurs., 17 June 4.15 p.m., Clarendon Lab., Oxford.	Theor Physics Seminar	Dr. L.M. Delves (Sussex Univ.)	Variation Principles in Physics.

Tickets for the International Plastics Exhibition will be available shortly from H.F. Norris, Bldg R.20 Ext 484.

Social News

RECORD PROGRAMME. Tuesday, 15 June, 12.30 p.m., in the Lecture Theatre.

For those who like brass bands, this is the occasion to hear the best. The music will be of old and new favourites played by the massed bands of the Royal Marines and the Royal Military College of Music.

OPEN DAY, Saturday, 19 June, 1965.

The Open Day Programme is being distributed concurrently with this bulletin, giving details of the scientific and engineering exhibits and the general arrangements.

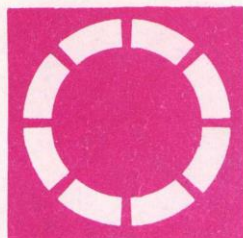
To interest the younger children up to 12 years of age there will be a programme of sports beginning at three o'clock and lasting one hour. Starting "money" for all entries.

An attractive layout of side shows is also being provided.

Rutherford Laboratory
11 June, 1965.

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

23/65
21 June 65



Rutherford Laboratory Bulletin

General News

INDIVIDUAL VISITS. The number of requests for Scientific Administration Group to show one or two people, who happen to be visiting someone at R.H.E.L., around the Laboratory is growing. Almost all these requests have been met, but it is regretted that this service will now have to be discontinued for lack of effort. This will not affect the arrangements for "party" visits.

THE INSTITUTE OF MATHEMATICS AND ITS APPLICATIONS. The Institute was founded in 1964 as a professional body to serve the interests of mathematicians in all fields of employment, and to promote the advancements of mathematics and its applications. Corporate Membership of the Institute (Fellowship and Associate Fellowship) is open to those holding recognised qualifications and having appropriate professional experience. There are also grades of Companion, Graduate and Student. Full details of the requirements for the several grades, and forms of application may be obtained from Dr. J. Howlett, Atlas Computer Laboratory Ext 547.

B.B.C-2 T.V. The Character of Physical Law. The Messenger Lectures given by Professor Richard Feynman. Programme 1, at 8.15 p.m., Tuesday 22 June, "The Law of Gravitation".

CONFERENCES ETC. The following list gives brief details of various conference, summer institutes, schools etc., which may be of interest:

28 June-2 July	3rd International Vacuum Congress, Stuttgart, Germany
1-10 July	International Conference on General Relativity and Gravitation, London.
1 July-25 Aug	Summer School for Theoretical Physics, Haute Savoie, France.
23-25 Aug	1965 Cryogenic Engineering Conference, Houston, Texas, U.S.A.
6-10 Sept	International Conference on Polarization Phenomena of Nucleons, Karlsruhe, Germany
9-16 Sept	International Conference on High Energy Accelerators, Frascati, Rome, Italy.

MISSING EQUIPMENT Present custodians of the following Facit Calculators are requested, please, to notify J.T. Reader (Extn 238) of their present location:

Type CA1-13	Number 723705
CA1-13	723706
CA1-13	682665
CA1-13	1156712
CM2-16	1009889
CM2-16	1019642

OVERSEAS VISITS. Mr. G.S. Grossart to Cologne, Stuttgart, Balzers and Geneva from 23 June for approx 2½ weeks. During this period he will be visiting vacuum equipment manufacturers, presenting a paper at the 3rd International Vacuum Congress at Stuttgart and visiting CERN to discuss problems of operation and maintenance on the Vacuum System of the P.S.

Dr. N. Lipman to CERN on 25 June for approx 6 months where he will be working on the K_2^0 experiment.

Mr. W.S. Spinks to CERN 27-29 June to attend meeting of European Sub-Committee on Microscope Automation.

Machine Schedules

P.L.A.

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
21 June	RHEL and Queen Mary College	Measurement of the Polarization of Neutrons from the $\text{Li}^7(\text{p}, \text{n}) \text{Be}^7$ Reactions at 50 MeV.
22 June	RHEL	Polarimeter Tests
23-26 June		Maintenance
27 June		Mk III P.P.S. Commissioning

Internal Events

Mon., 21 June 11.15 a.m. Lecture Theatre	Nimrod Lecture Series	Dr. J. Dowell (Birmingham Univ)	Search for Hyperon Resonances using Spark Chambers
Wed., 23 June 2 p.m., R.12 Conf. Rm.	P.L.A. Div. Seminar	D. Scott (Oxford)	The Oxford Group Particle Spectrometer and some examples of its use
Wed., 23 June 2.15 p.m., Lecture Theatre	Talk on NINA (No.2)	Dr. E. Gabathuler (DNPL)	Experimental Utilization

Thurs, 24 June: Lecture-Demonstration by Mr. S. Halligan of the Computer Control Corporation, Framingham, Massachusetts, of their computer models type 116, 124 and 224, and digital modules constructed from microminiaturised circuits. 2.30-4.30 p.m. in the Main Conference Room, R.1. Further information may be obtained from Mr. D. Lord, Building R.1, Ext 527.

Mon., 28 June 11.15 a.m. Lecture Theatre	Nimrod Lecture Series	Dr. J. Orear (CERN)	High Energy Scattering
Atlas Lab. Tues., 22 June 2.30 p.m., Atlas Lab. Conf. Rm.	Informal Talk	E.J. Simbo (Fourah Bay College, Sierra Leone)	An Introduction to the LIST Processing Language 1PL-V

External Events

Wed., 23 June 5.30 p.m., King's College, London.	Inst. of Maths Lecture	Mr. J.S. Sawyer (Met. Office)	Mathematics Applied to the Large Scale Dynamics of the Atmosphere
---	------------------------------	----------------------------------	---

Social News

RECORD PROGRAMME. Tuesday, 22 June at 12.30 p.m., Lecture Theatre.

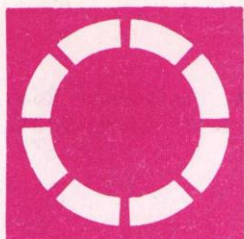
The record to be played this week is of Duke Ellington's score for the film "Anatomy of a Murder". Rarely can a score commissioned to serve as background to a film have been so brilliantly composed. The Duke's abilities are all in evidence. It is also an exciting record for the Hi-Fi listener. The range of the score from solo alto to full orchestra makes exciting sound.

CHRISTIAN FELLOWSHIP. The next meeting will be on 23 June 1-1.30 p.m. when Mr. Ray Powell of the Accounts Section will lead Bible Study on I John, Ch. 5, vv. 7-13. Further details from B.E. Kingdon, R.20, Ext 6297.

Rutherford Laboratory
18 June 65

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

No. 24/65
28 June 65



Rutherford Laboratory Bulletin

General News

UNIVERSITY APPOINTMENT. Dr. P.G. Murphy of the Rutherford High Energy Laboratory has been appointed to the newly established additional Chair in Physics at Manchester University. He will take up his appointment in October of this year.

VISIT A party of Students and Members of Staff from the Guildford Technical College will visit the Laboratory on the afternoon of 1 July.

CONFERENCE Further details are now available regarding the "International School of Physics" to be held at Trapani - Erice, Sicily from 27 September - 10 October, 1965. This information can be seen on notice boards or in Room 21, Bldg. R.20. Closing date for applications is 10 July.

UNIVERSITY VACANCIES. The Universities of Geneva, Lausanne and Neuchâtel have vacancies for a Professor in Nuclear Physics and a Professor in Elementary Particle Physics. Further information from H.F. Norris, Bldg. R.20, Ext. 484.

Machine Schedules

P.L.A.

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
28-29 June		Mk. III P.P.S. Commissioning
30 June - 3 July	Birmingham Univ.	Polarization Studies at 50 MeV
4 - 7 July	Oxford Univ.	Measurements of (p,d) Polarization Asymmetries on Si and Mg Isotopes

Internal Events

Mon., 28 June, 11.15 a.m., Lecture Theatre	Nimrod Lecture Series	Dr. J. Orear (CERN)	High Energy Scattering
--	-----------------------------	------------------------	------------------------

Film Show: A twenty minute dramatised film about fire safety, entitled "Suspects All", will be shown in the Lecture Theatre on the following days, at the times stated:

Tuesday 29 June 12 Noon	Thursday 1 July 13.00 p.m.
Wednesday 30 June 12.30 p.m.	Friday 2 July 13.30 p.m.

There will be no lecture in the Nimrod Series on July 5.

The Talk on NINA (No. 3) to be given on 30 June has been postponed, and will now be given at 2.15 p.m. in the Lecture Theatre on 7 July.

Demonstration - A demonstration of the Philips Modular Pulse Generator Type P.M 5720-40 will be given by Mr. Reeder of the M.E.L. Equipment Co., Ltd., Crawley,

at 11.30 a.m. on Tuesday, 29 June, in the P.L.A. Conference Room, Bldg. R.12.
Further details may be obtained from Mr. S. Maskell, Bldg. R.25, Ext. 534.

Social News

RECORD PROGRAMME. Tuesday, 29 June at 12.30 p.m., Lecture Theatre.

This programme will be devoted to light music with selections from "The Merry Widow" and "My Fair Lady".

CHRISTIAN FELLOWSHIP. Members of the R.H.E.L. Group are reminded that the United Fellowship A.G.M. will be held in the Social Club Chapel, A.E.R.E., at 12.45 p.m. on Wednesday, 30 June. Further details may be obtained from B.E. Kingdon, R. 20, Ext. 6297.

Rutherford Laboratory
25 June 1965

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