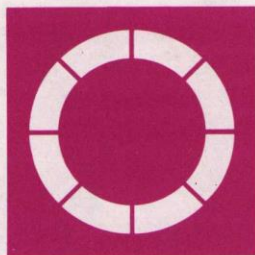


9/69
3 March 69



Rutherford Laboratory Bulletin

General News

VISITORS Ten students from Cambridge University will visit the Laboratory on Tuesday, 4 March.

RADIATION PROTECTION NOTICE - FILM ISSUES. Period 3 commenced Monday, 24 February. Colour Strip - BLUE for $\beta\gamma$ and fast neutron films. Please check that you are wearing the correct films.

FOUND. Found in the East Wing, Building R.1, Treasury Note. Will loser please contact Mr. D. Williams, Personnel Section, Building R.20.

OVERSEAS VISITS. Dr. J. J. Phelan and Dr. R. J. Miller, to CERN, 27 Feb - 7 Mar., 14 GeV K^- experiment at CERN.

Dr. A. Oxley, to CERN, 27 Feb - 8 Mar, monitoring picture quality for H.P.D.

Mr. B. Parkinson, Mr. M. D. Percival and Mr. L. Phillips, to CERN 2 - 4 mar., in respect of Epistle Experiment and other matters.

Mr. J. D. Lewin, to the U.S.A. 2 Mar. for two weeks to attend Particle Accelerator Conference in Washington and to visit other establishments.

Mr. F. S. Gilbert and Mr. H. Hadley, to the U.S.A., 3 - 25 Mar, to attend Particle Accelerator Conference and to visit other laboratories.

Mr. R. H. C. Morgan and Mr. T. R. Walsh, to the U.S.A., 3 - 14 Mar., to attend the Particle Accelerator Conference and visit other laboratories.

Mr. J. R. Stokoe, to CERN, 3 - 5 Mar., for discussions.

Dr. G. Manning to CERN, 4 - 6 Mar., to attend I.S.R. meeting

Mr. H. Aldred, to CERN, 4 - 7 Mar, for discussion on stores problems.

UNCLAIMED MAIL A letter from Birmingham, addressed to A. R. DeSouza, Esq., may be claimed from Scientific Admin., R.20, Ext. 6297 or 484.

Machine Schedules

NIMROD Cycle 4 (4.3.69 - 25.3.69)
Machine Physics,
High Energy Physics.

Team	Beam	Experiment	
Birmingham U.	K12	K^+p Differential Cross-section Measurements from 0.45 - 0.85 GeV/c.	Data
Cambridge U./RHEL	K13	Measurement of the Amplitude for $\Delta S = - \Delta Q$ Interactions in K^0 Decay.	Data
Westfield Coll./RHEL	K14	Non-leptonic Decay Parameters of the Σ^+	Data
Imp. Coll./Southampton	π^-	An Investigation of Narrow Bosons Produced in π^-p Collisions	Setting up
AERE/QMC/RHEL/Bergen	P71	pp Elastic Scattering at Large Angles between 1.5 and 4.0 GeV/c	Setting up
UCL/RHEL	K8	K^-p Differential Cross-sections, 0.85 - 2.2 GeV/c	Data
Birmingham U./RHEL	X1/K9	π^+d Exposure at 4 GeV/c	Data

P.L.A.

Date	Team	Experiment
3 - 7 Mar.	Birmingham U.	Polarization of 30 MeV Protons Scattered from C^{13}
8 - 10 Mar.	Kings Coll. London	Polarization of Protons Scattered by N^{14} and O^{16} .

Internal Events

Mon., 3 Mar.,
11.30 a.m. Lecture
Theatre.

Nimrod
Lecture
Series

Dr. Arne Lundby
(CERN)

K^+p Elastic Scattering in the Intermediate and the High Energy Region.

Tues., 4 Mar. 11 a.m. Lecture Theatre	HEP Disc Grp.	Dr. H. Pagels (Rockefeller U.)	Pion Mass Extrapolations and P.C.A.C.
Wed., 5 Mar. 11 a.m. Conf. Rm., R.1.	H.E.P. Disc Grp.	Dr. D. A. Nutbrown (Cambridge)	The Algebra of Currents, Veneziana Model and the $A, p \pi$ System.
Wed., 5 Mar. 12.40 p.m. Thurs. 6 Mar. 1.15 p.m. Lecture Theatre.	Film	"Green for Ireland"	17 mins., colour

Forget those winter blues and come and see this award winning film about the Emerald Isle. Leaving Dublin the film meanders through the Irish countryside visiting some of the stately homes; on to the Dingle Peninsula in the south-west and north to the Cliffs of Moher, collecting on the way glimpses of the Panchestown Races and farmers travelling their sheep by curragh boat from island to island.

Thurs. 6 March, 10 a.m. - 4 p.m. in the Main Conference Room, Bldg. R.1: Exhibition of Electronic Test Equipment by Advance Instruments Ltd., (Further details may be obtained from B. E. Kingdon, R.20, Ext. 6297).

Thurs. 6 Mar., 3.15 p.m. Lecture Theatre	Rutherford Laboratory Lecture	Dr. G. H. Stafford	Why do High Energy Physics?
Mon., 10 Mar., 11.30 a.m. Lecture Theatre	Nimrod Lecture Series	Dr. D. R. O. Morrison (CERN)	2 Body Reaction at High Energies.

External Events

Mon. 3 Mar. 4.15 p.m. Queen Mary Coll.	Theor. Phys. Seminar	Dr. K. J. Barnes (Imp. Coll.)	Non-linear Pion Lagrangians
Mon., 3 Mar., 4.15 p.m. Clarendon Lab., Oxford.	Elementary Particle Theory Seminar	Dr. I. G. Halliday (I.C. London)	Self-consistent Regge Singularities
Mon., 3 Mar., 5 p.m. Univ. of Reading	Colloq.	Prof. W. F. Vinen (Birmingham)	Transport Properties of Type II Superconductors
Tues. 4 Mar., 2 p.m. Daresbury Lecture Theatre.	Daresbury Lecture Series	Dr. E. Sacharidis (CERN)	Large Angle p-p Scattering at High Energies.
Tues., 4 Mar., 2.30 p.m. 21 Banbury Rd. Oxford.	Nucl. Phys. Seminar	Dr. J. Nelson	Polarization Effects in Two Nucleon Transfer Reactions.
Thurs. 6 Mar., 4.15 Clarendon Lab., Oxford.	Theor. Phys. Seminar	Dr. G. D. Cohen (Rockefeller U. & Amsterdam)	Kinetic Theory of Dense Gases (including a cine film)
EVENTS AT AERE			
Tues. 4 Mar., 2 p.m. Conf. Rm., Bldg. 8.9	Theor. Phys. Seminar	Dr. J. F. Reading	Fun Things with the Schroedinger Equation
Thurs., 6 Mar., 3.30 p.m. Conf. Rm., H8	Nucl. Phys. Colloq.	Dr. P. G. H. Sandars (Clarendon)	Search for Electric Dipole Moments as Evidence for the Violation of Time Reversed Invariance.

Social News

RECORD SOCIETY 12.30 p.m. Tuesday, 4 March in the Lecture Theatre (All welcome);
A selection of favourite items by the G.U.S. (Munn and Felton's) Brass Band, conducted by Harry Mortimer and Stanley Boddington.

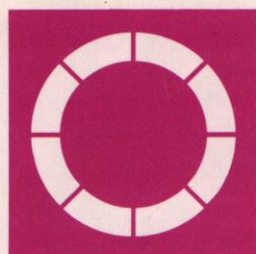
CHRISTIAN FELLOWSHIP. The Reverend John Savage is responsible for the Datchett Fellowship, which is a project near Brightwell, Wallingford, providing homes for retired missionaries and ministers. He takes an active part in Christian witness in the area and we are pleased to welcome him on Friday, 7th March at 12.30 p.m. in the P.L.A. Conference Room, when his subject will be "The Second Coming of Our Lord Jesus Christ". Please feel free to join us.

H. F. Norris Ext. 484

Scientific Admin. Group, Building R.20

Rutherford Laboratory
28.2.69.

No.10/69
10 Mar 69



Rutherford Laboratory Bulletin

General News

FERMI AVENUE - ROADWORKS. On Saturday and Sunday, 8 and 9 March, a trench will be dug between Rutherford Avenue and the Atlas Computer Lab. Although reduced in width the road will be open, and drivers are asked to use caution.

RADIATION PROTECTION NOTICE - FILM ISSUES. It is Period 3. Colour Strip - BLUE - for γ and fast neutron films. Please check that you are wearing the correct films and that all old films are returned.

MISSING EQUIPMENT. The following item of equipment has been reported missing from Lab. G5-G9, Bldg. R25:-
Hewlett-Packard, 651A, Test Oscillator, Ser. No. 436-00126.

Will anyone with information on the present whereabouts of this instrument please contact R.A. Swales, R25, Ext. 6614.

LABEX INTERNATIONAL 1969. Earls Court, 25-29 March. Tickets and information now available from H.F. Norris, R.20, Ext. 484.

OVERSEAS VISITS. Mr G.B. Stapleton, to CERN, 9-12 March, to participate in a radiation damage dosimetry experiment with the CERN P.S.

Mr A.E. Thorp and Mr W. Turner, to CERN, 10-12 March, for investigation of rapid cycling cameras at CERN.

Dr. G. Manning, to CERN, 13-19 March, to attend I.S.R. Meetings and for discussion.

PHYSICS EXHIBITION 1969. Tickets are still available for the Physics Exhibition, to be held at Alexandra Palace, N. London 10-13 March inclusive, at which the SRC have three exhibits on Stand 10. Tickets from H.F. Norris, R.20, Ext. 484.

Machine Schedules

NIMROD Cycle 4(4.3.69 - 25.3.69)

Machine Physics: High Energy Physics (K12, K13, K14, π^+ , π^- , P71, K8 and X1/K9)

Full details of Cycle 4 were given in Bulletin No. 9/69.

P.L.A.

Date

Team

Experiment

11-16 Mar.

King's Coll. London

Polarization of Protons Scattered by N^{14} and O^{16} .

Internal Events

Mon., 10 Mar., 11.30 a.m.
Lecture Theatre

Nimrod Lecture
Series

Dr. D.R.O. Morrison
(CERN)

2 Body Reactions at High
Energies.

Wed., 12 Mar., 11 a.m.
Conf. Rm., R.1.

HEP Disc
Grp.

Dr. I.G. Halliday
(Imp. College)

Self Consistent Regge
Singularity.

Wed., 12 Mar., 12.40 p.m.
Thurs., 13 Mar., 1.15 p.m.
Lecture Theatre.

Film

NIMROD Part 3: How is the Research Done.

The story so far has dealt with the reasons for building large accelerators and how Nimrod was designed and built. With the machine working, operational and maintenance procedures have to be learnt. A research programme has to be planned and experiments set up. Dr. Pickavance now tells how these problems were dealt with and Dr. Thresher continues the story with a description of the K7 experiment.

Wed., 12 Mar., 2 p.m.
Conf. Rm., R.12.

P.L.A.
Group Seminar

Dr. N. Jarvis and
Dr. A. Langsford (A.E.R.E.)

Plans for Future work on the
A.E.R.E. Synchrocyclotron.

Mon., 17 Mar., 11.30 a.m.
Lecture Theatre.

Nimrod
Lecture Series

Dr. V.Z. Peterson
(R.H.E.L.)

L.R.L. Hawaii $K_L^0 \rightarrow 2\pi^0$

External Events

Mon., 10 Mar., 4.15 p.m.
Queen Mary Coll., London.

Theor. Phys.
Seminar

Dr. A. Huber
(Birmingham)

Variational Principles and Stabili-
ty in Quantum Statistical
Mechanics.

Mon., 10 Mar., 4.15 p.m.
Clarendon Lab., Oxford.

Elementary Particle
Theory Seminar

Prof. E.J. Squires
(Durham)

Resonances and Regge Poles.

Tues., 11 Mar., 2 p.m.
Lecture Theatre, Daresbury.

Daresbury Lecture
Series

Dr. R.M. Turnbull
(Glasgow)

The Interaction of 10 GeV/c
 K^+ Mesons with Hydrogen.

Tues., 11 Mar., 2.30 p.m.
21 Banbury Rd., Oxford.

Nuclear Phys.
Seminar

Prof. O. Kofoed-Hansen
(CERN)

The Interpretation of High
Energy Scattering Data on Nuclei.

Tues., 11 Mar., 8.30 p.m.
21 Banbury Rd., Oxford.

Elementary Part.
Phys. Seminar

Prof. D.H. Miller
(LRL, on leave at CERN)

Where are Quarks?

Wed., 12 Mar., 2.30 p.m.
University of Manchester.

Theor. Phys.
Seminar

Dr. J.S. Dowker

The Aharonov-Bohm Effect;
A Paradox?

Wed., 12 Mar., 7 p.m.
Yarnton, Oxford.

IEE
District Meeting

D. Clark (Chief
Planning Eng., C.E.G.B.)

Electricity and the National
Fuel Policy.

Thur., 13 Mar., 4.15 p.m.
Clarendon Lab., Oxford.

Theor. Phys.
Seminar

Dr. A.N. Kamal
(RHEL)

Pion Form Factors and
 $\pi - \pi$ Shifts.

Thur., 13 Mar., 4 p.m.
Univ. Coll., London.

Elementary Particle
Seminar

Dr. E. Zacharides
(RHEL)

Large Angle Proton-Proton
Elastic Scattering at High Energies

EVENTS AT AERE

Tues., 11 Mar., 2 p.m.
Conf. Rm., Bldg. 8.9.

Theor. Phys.
Seminar

Prof. J.J. Hopfield
(Cavendish)

Superconductivity Alchemy in
Transition Metals.

Thurs., 13 Mar., 3.30 p.m.
Conf. Rm., H.8.

Nucl. Phys.
College.

Dr. J.V. Jelley

Optical Observations of Pulsars
and Allied Topics.

Social News

CHRISTIAN FELLOWSHIP. What is to be the Christian attitude towards pain and suffering? Must the Christian face all suffering with courage and faith? John Hart will speak on "The Problem of Pain", 12.30 p.m., Fri., 14 March, P.L.A. Conf. Rm., R.12.

RECORD SOCIETY. 12.30 p.m., Tues., 11 Mar., Lecture Theatre (All welcome).

Music by the Modern Jazz Quartet,

Recorded 'live' during one of their European tours. This is not 'way-out' jazz, but a pleasant, easy-to-listen-to selection which should be enjoyed by most people. Come and relax for half-an-hour.

Rutherford Laboratory

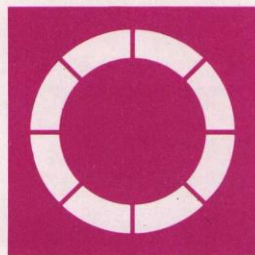
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H.F. Norris, Extn. 484

Scientific Admin. Group, Building R.20

No. 11/69
17 Mar 69



Rutherford Laboratory Bulletin

Professor B. H. Flowers F.R.S., Chairman of the Science Research Council, will be visiting the Rutherford Laboratory Friday 21 March 1969. He will be joined by Dr. J. M. Hill, Chairman of the U.K.A.E.A. at lunch time and in the afternoon the party will tour the Laboratory.

General News

VISITORS. Ten Librarians from the South Berks College of Further Education will visit the Laboratory on Monday 17 March.

Thirty people attending the Low Temperature Technology Course at AERE will visit the Laboratory on Wednesday 19 March.

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

Solartron Digital Voltmeter, Type LM 1420.2, Ser/No. 201055, AERE Loan Pool No. 5123.

This item has been removed without permission from a Storage Rack in R.18 and anyone with information on its present whereabouts is asked to contact Mr. K. J. Harris Ext. 6170. *FA. Branham*

Avometer, Ser/No. 1587-C-363
Transistor Tester, Model 1325.

Anyone with information on these items is asked to contact Mr. J. Cresswell, Bldg. R.36, Ext. 6125.

RADIATION PROTECTION GROUP - FILM ISSUES. It is Period 3. Colour Strip - BLUE for $\beta\delta$ and fast neutron films.

The next film period commences Monday 24 March. Due to the long NIMROD shutdown, there will be no fast neutron issue. At the commencement of the shutdown, all old fast neutron films (not Holders) are to be returned to Personal Dosimetry Service, R.20.

CONFERENCES, SUMMER SCHOOLS, INSTITUTES, ETC. The following list gives brief details only of selected meetings etc. from the large amount of information recently received. Further details of these and other events can be obtained from H.F. Norris, Room 42, Bldg. R.20. Ext. 484:-

- 25-28 March Conference - "Lasers and Opto-Electronics", Univ. of Southampton.
- 31 Mar-3 Apr Seminar - "Practical Design with Integrated Circuits and Advanced Measurement Techniques", Paris.
- 1-2 Apr Symposium - "Digital Storage Techniques", Kingston Coll. of Technology, England.
- 11-27 Apr Int. School - "Developments of Applied Superconductivity", Erice, Sicily.
- 13-18 Apr Conference - "Fracture", Brighton, England.
- 15-16 Apr Seminar - "Forecasting Techniques", London England.
- 6-8 May Symposium - "Nuclear Electronics", Ispra, Italy.
- 18-20 June Conference - "Symmetries and Quark Models", Detroit, U.S.A.
- 30 June-27 July Summer School - "Weak Interactions and Quantum Statistical Mechanics", Cargese, Corsica
- 3-19 July Int. School - "Present Problems in Particle Physics", Erice, Sicily.
- 7-18 July Summer School - "Group Representations and Quantum Theory", Dublin, Ireland.
- 7-18 July Summer School - "Plasma Physics", Culham Laboratory, Abingdon.
- 14 July-1 Aug Summer Inst. - "Weak Interactions" Univ. of Karlsruhe, Germany.
- 22 July-2 Aug Summer School - "Theoretical Physics", Liperi, Finland.
- 18-23 Aug Conference - "High Energy Physics", (title may be incorrect) Boulder, U.S.A.
- 8-12 Sept Symposium - "Conformational Analysis Scope and Present Limitations", Brussels, Belgium.
- 14-28 Sept Int. School - "Elementary Particle Physics", Herceg-Novi, Yugoslavia.
- 5-7 Nov Conference - "Accelerator Dosimetry and Experience" SLAC, U.S.A.
- 12 Jan-10 Apr '70 IAEA Winter School - "Theory of Imperfect Crystalline Solids", Trieste, Italy.

OVERSEAS VISITS Dr. L.C.W. Hobbs, Dr. J. Ranft and Mr. M.R. Harold, to CERN, 16-18 March, to attend meeting of the Study Group for High Efficiency Ejection.

Dr. J. T. Hyman, to CERN, 17-20 March, for discussions on computer control systems with I.S.R., Bubble Chamber Groups and for 300 GeV Controls Working Party meeting.

Dr. I. Butterworth, to CERN, 18-19 March, to attend Track Chamber Committee meeting.

METRICATION EXHIBITION AND LECTURES 13-15 March, Oxford College of Technology. Received too late for previous bulletin, the lectures are mainly orientated to Architects, Engineers and Printers. The last day (Sat.) - Exhibition open 11.00-16.00 hrs. Films - (1) "It's later than you think", (5 mins) and (2) "The ABC of Decimalisation", (12 mins) - showing from 11.15 a.m. to 3.20 p.m.

Machine Schedules

NIMROD Cycle 4 (4.3.69. - 25.3.69.)

Machine Physics: High Energy Physics (K12, K13, π 7, P.71, KB and XI/K9).

Full details of Cycle 4 were given in Bulletin No. 9/69.

P.L.A. The machine will be shut down for one week, 17-24 March.

Internal Events

Mon, 17 Mar, 11.30 a.m. Lecture Theatre	Nimrod Lecture Series	Dr. V.Z. Peterson (RHUL)	L.R.L. Hawaii $K_L^0 \rightarrow 2\pi^0$
Wed, 19 Mar, 11.00 a.m. Conference Room, R.1	H.E.P. Disc Group	Dr. P. Watson (Oxford)	Relativistic Quark Model
Wed, 19 Mar, 11.30 a.m., Lecture Theatre	Special Lecture	Dr. H.E. Butler (Royal Observatory Edinburgh)	Astronomy by Satellite and Rocket.
Wed, 19 Mar 1.15 p.m., Thurs. 20 Mar, 12.40 p.m. Lecture Theatre	Film	NIMROD Part 4: The K7 Experiment (Please note change of showing times)	

In this, the last part, the Director concludes the story of Nimrod and describes some of the apparatus used by the high energy physicists. Spark and bubble chamber techniques are discussed and finally Dr. Pickavance tells how the data is analysed using track analysis measuring machines and computers.

Fri. 21 Mar, 11 a.m. Lecture Theatre Talk by the Chairman of the Science Research Council to an invited audience only.

Mon, 24 Mar., 11.30 a.m., Lecture Theatre Nimrod Lecture Series Prof. D.H. Perkins (Oxford) Weak Interactions at High Energy

External Events

Mon, 17 Mar, 4.15 p.m., Queen Mary Coll. London Theor. Phys. Seminar Prof. J.S. Blair (Seattle and Surrey) Proton Isobaric Analogue Resonances.
Mon, 17 Mar, 5 p.m., Univ. of Bristol Phys. & Geo-Phys. Colloq. Dr. J.V. Jelley (AERE) Čerenkov Radiation in the Atmosphere and Upper Air Fluorescence for Studies in γ -Ray and X-ray Astronomy.

Tues. 18 Mar, 2 p.m. Lecture Theatre, Daresbury Daresbury Lecture Series Dr. J. Edgington (Q.M.C.) Study of $\pi^- + p \rightarrow \Sigma^- + K^+$ at 1.1 GeV/c using a Polarised Proton Target.

Thurs, 20 Mar, 4 p.m. Univ. Coll. London Elementary Particle Seminar Prof. E. Gabathuler (Daresbury) Photoproduction of High Energy Electron Pairs.

Thurs. 20 Mar, 8.30 p.m. 21 Banbury Rd., Oxford Elementary Particle Phys. Seminar Dr. D. Jovanovitch (Manchester U. on leave from Argonne) A detailed Study of the Reaction $\pi^+ p \rightarrow \Sigma^+ K^+$ from 4-7 GeV/c.
(Note - last lecture in series until after Easter).

EVENT AT THE ATLAS LAB.

Thurs, 20 Mar, 2.15 p.m., Large Conference Room Talk Dr. K. Wohtfahrt (Heidelberg) On the Structure of SL (2,Z).

EVENTS AT A.E.R.E.

Tues, 18 Mar., 2 p.m., Conf. Room Bldg. 8.9 Theor. Phys. Seminar Dr. P. Schoefield (A.E.R.E.) A New Look at Thermodynamic Scaling Laws.

Thurs, 20 Mar, 3.30 p.m. Conf. Room, H.8 Nucl. Phys. Colloq. Dr. H. Postma (Kamerlingh Onnes Lab. U. of Leiden, Netherlands) Capture Gamma-Ray Spectroscopy with Oriented Nuclei.

Social News

RECREATIONAL SOCIETY - CHESS TOURNAMENT 1968/69. "Bill Turner Wins Again".

For the second year running the chess tournament has been won by Bill Turner, again without losing a single game. His final tally being seven wins and two draws, to give him eight points.

An analysis of the results table, round by round shows that various players were challenging Bill up to the sixth round when he went into the lead by half a point. Bill maintained this lead in the seventh round and increased it again in the eighth round when Mike Newman who had been pushing Bill hard with five wins in a row, crashed.

In the meantime Noel Stewart and Peter Craske had been creeping up steadily and finished strongly to take joint second place with six and a half points apiece.

One gathers that there will be a presentation of a book to Bill Turner (on Chess!!!).

Congratulations to Bill and to everyone involved in again running a very successful tournament.

CHRISTIAN FELLOWSHIP. Mr. J. L. Thomas leads the Christian Fellowship "Every man a Bible Student" session at 12.30 p.m. on Friday 21 March, in the P.L.A. Conference Room. His subject - Doubts and Causes of Growing Old along the Christian Way. Join in the Fellowship and bring your friends.

RECORD SOCIETY. 12.30 p.m., Tues., 18 Mar., Lecture Theatre. All welcome.

The Clancy Brothers, with Tommy Makem, in (belated) celebration of Saint Patrick's Day.

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

Rutherford Laboratory

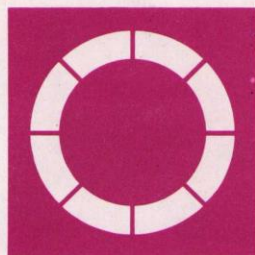
13.3.69.

TAIL PIECE. Many amusing variations of the correct address are well known, including the "Brotherhood Laboratory". This example, on a letter addressed to Mrs. Nuthakki of the Theoretical Studies Group is offered without comment:-

Mrs. NUTVAKLE, RIDGEWAY HOME, ACRE HAWELL, DIDICOT, BERKS.

LDB.

No. 12/69
24 Mar 69



Rutherford Laboratory Bulletin

General News

SCIENTIFIC ADMIN. NOTICE. The next issue of the Bulletin, No: 13/69, will cover two weeks. Items for inclusion should be sent to H.F. Norris, Rm. 42, R.20, Ext. 484 not later than Wednesday 16th March.

NIMROD SHUT-DOWN. Nimrod will be shut down from 06.00 hours on 25th March for approximately seven weeks, for (1) installation of a new extraction system to transport a beam to Hall 3, and (2) to install a solid pole rotor in one of the two main alternators.

FILM NOTICE. Period 4 commences Monday, 24th March. Colour Strip - GREEN for $\beta\gamma$ films. There will be no issue of fast neutron films due to the Nimrod shutdown - please return all old films but retain the holders.

Change of TLD's (6 monthly cycle) for people whose surnames begin with M.N.O.P.

VISIT. Twenty sixth form pupils from St. Bartholomew's Grammar School Newbury will visit the Laboratory on Saturday, 29th March.

MISSING EQUIPMENT. The following item of equipment has been reported missing from Building R.25:-

Test Oscillator, Type 651A Ser. No. 436-00126.

Anyone with information on the present whereabouts of this item is asked to contact Mr. R.A. Swales, Building R.25, Ext. 320/6614.

OVERSEAS VISITS. Dr. A. Astbury, to CERN, 23-26 March, to discuss the feasibility of a low momentum \bar{p} -p elastic scattering experiment at CERN.

Dr. N.H. Lipman and Mr. P.L. Davidson, to CERN 23-25 March, for discussion on method of construction of Charpak chambers.

Machine Schedules

P.L.A.

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
24 Mar-3 Apr.	Birmingham Univ.	Inelastic Scattering of 30 MeV Polarized Protons on O^{14} and N^{14} .

Internal Events

Mon. 24 Mar., 11.30 a.m. Lecture Theatre	Nimrod Lecture Series	Prof. D.H. Perkins (Oxford)	Weak Interactions at High Energies.
Mon. 24 Mar., 2.15 p.m. Lecture Theatre	Nimrod Proposal Lectures.	1. (2.15 pm) Dr. C.J.S. Damerell (RL):- A Proposal to Study K^+n Elastic Scattering and K^+n Charge Exchange Scattering between 450-950 MeV/c (Birm./R.L.). 2. (3.15 pm) Dr. B.G. Duff (U.C.L.):- A Proposal to Measure the Differential Cross-Section in K^+p Elastic Scattering in the Momentum Range 1.6-2.35 GeV/c (UCL/RL).	

Thurs. & Fri. 27 & 28 March, Lecture Theatre - Conference on Radiation Protection in Accelerator Environments, sponsored by the Society for Radiological Protection, (S.R.P.) and the Science Research Council. Approximately 130 people are expected to attend from Universities, Research Establishments, Hospitals and Industry. A visit to Nimrod has been arranged on the afternoon of Friday, 28th March.

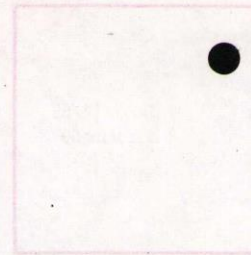
There will be no Film Show this week.

Mon. 31 Mar. 11.30 a.m. Lecture Theatre	Nimrod Lecture Series	Dr. Louis Dick (CERN)	The Spin Effect in High Energy Scattering. New Results at 6 and 14 GeV/c.
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External Events

Mon. 24 March. 4.15 p.m. Queen Mary Coll. London	Theor. Phys. Seminar	Prof. D. Amati (Orsay)	Some Remarks about Duality
Mon. 24 Mar., 2 p.m. Daresbury Lecture Theatre	Daresbury Lecture Series	Dr. N. Booth (RHEL, Argonne)	Probable Title:- Polarisation in Backward πp Scattering.
Thurs. 27 Mar. 7.30 p.m. Univ. of Reading	I.E.R.E. District Meeting	G.W.A. Dummer	Electronic Components: Past, Present and Future.
EVENT AT AERE.			
Tues. 25 Mar. 2 p.m. Conf. Room Bld. 8.9	Theor. Physc. Seminar	Prof. J. Bilby (Sheffield)	Materially Uniform Simple Bodies

Rutherford Laboratory Bulletin



Social News

RECORD SOCIETY 12.30 p.m. Tues., 25th March, Lecture Theatre (All welcome)

"Tabor" and "Blanik": the last two symphonic poems from the cycle of six entitled "Ma Vlast" (My Country) by Smetana. These are much less frequently heard than the two well known ones, "Vltava" and "From Bohemias' Woods and Fields", and as they are both based on the stories of the Hussite warriors (the old Bohemian Knights), they are usually played together. The Czech Philharmonic Orchestra is conducted by Vaclav Talich.

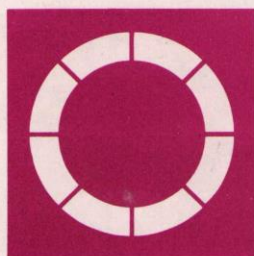
CHRISTIAN FELLOWSHIP. Friday, 28th March, P.L.A. Conf. Room at 12.30 p.m.

Prayer Meeting - Ben Kingdom leads a quiet time of prayer. Please come along and join in.

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

Rutherford Laboratory
21.3.69.

No. 13/69
31 Mar 69



Rutherford Laboratory Bulletin

General News

CHAIRMANS TALK The text of Rutherford Laboratory Circular No. 15/69 is reproduced below to ensure that the message reaches the widest possible readership.

Visit by the Chairman of the Science Research Council

The talk which Professor Flowers gave during his visit last Friday contained a statement of Council policy which is of particular interest and relevance to the Rutherford Laboratory. A recording was made of the talk and I have arranged for it to be replayed in the Lecture Theatre on Monday 31st March at 1 p.m. and Tuesday, 1st April at 12 noon. Further replays will be arranged if required.

Although no press release on the talk was issued, reports have appeared in newspapers. I should therefore like to summarize the main points made by the Chairman. These were:-

- (1) As far as the Nuclear Physics Programme is concerned the first priority of the Council remains the 300 GeV project. The Council will therefore continue to press the Government to reverse its previous decision that Britain will not participate in the project.
- (2) The Council recognizes that the money required to join the 300 GeV project can only be found by reducing the cost of the national part of the Nuclear Physics Programme. In order to join the 300 GeV project the Council is prepared to reduce the operation of Nimrod and eventually shut it down by about 1975.
- (3) If this plan is followed the number of staff supporting high energy physics in the Rutherford Laboratory will be reduced to around 800 over the next seven or eight years. The Chairman emphasized that such a reduction, if required, would be achieved by using normal redeployment and wastage of staff. The creation of redundancy plays no part in the Council's plans.
- (4) Finally the Chairman expressed his confidence in the long term future of the Rutherford Laboratory both as a staging post for the use of international accelerators, and as a centre which could be exploited for other areas of the Council's work.

I must add that I am not at all gloomy about the future of the Laboratory. We must change but we should always be prepared to be flexible. There are plenty of exciting things to be done in the future.

DARESBUURY DIRECTOR HONOURED Professor A. W. Merrison, Director of the Daresbury Laboratory has been elected a Fellow of the Royal Society. He has been appointed Vice-Chancellor of Bristol University, an appointment he will take up in the autumn.

FILM NOTICE Period 4 commenced Monday, 24 March. Colour Strip - GREEN for 8 $\frac{1}{2}$ films. There is no issue of fast neutron films due to the Nimrod shut-down period. Please return all old fast neutron films, but retain the holders.

VISITORS The following visits to the Laboratory have been arranged:-

Tues., 1 April: Fifteen students from Uppsala University, Sweden.
Wed., 2 April: Business Study Students from the North Berks College of Further Education
Wed., 9 April: Five Southern Electricity Board Control Engineers.
Fri., 11 April: Twenty-five Technicians from the London Hospital Research Laboratories.

OVERSEAS VISITS Mr. L. Phillips, Mr. E. Blatchford and Mr. P. Powell, to CERN, 30 March-6 April for repairs and modifications to Type II Spark Chambers on S70 Experiment.

The following will be attending the European Physical Society Florence Conference from 8-12 April:-

Dr. T.G. Pickavance, Dr. G.H. Stafford, Dr. H.H. Atkinson, Mr. M. Snowden, Mr. J. Lawson, Dr. J. Ranft, Dr. R.C. Hanna, Dr. J.C. Hart and Dr. T.G. Walker.

Dr. N.H. Lipman will attend the Florence Conference and will then travel directly to the U.S.S.R. to attend the Dubna Conference, 15-18 April.

Dr. A. Astbury after attending the Florence Conference will visit CERN for discussions, returning to the Laboratory on 16 April.

Dr. D. Morgan will also attend the Florence Conference. He will then give a lecture at Padua on 14 April, travel to CERN for discussions on 16 April, finally moving on to France for discussions at Saclay and Orsay, returning to the Laboratory on 18 April.

Machine Schedules

P.L.A.

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
31 March-3 April	Birmingham Univ.	Inelastic Scattering of 30 MeV Polarized Protons on O ¹⁴ and N ¹⁴
4-10 April		Shut-down
11-13 April	RHEL	Analyser Calibration and "D" Parameter Measurements.

Internal Events

Mon., 31 March, 11.30 a.m., Lecture Theatre	Nimrod Lecture Series	Dr. Louis Dick (CERN)	The Spin Effect in High Energy Scattering. New Results at 6 and 14 GeV/c.
Mon., 31 March, 1.00 p.m. Tues., 1 April, 12.00 noon Lecture Theatre			Play-back of the recording made last Friday of the Chairman's talk. (See text of RLC'5/69. reproduced above).
Wed., 2 April, 11.00 a.m. Conf. Rm., R.1.	H.E.P. Disc. Grp.	Dr. G. Violini (Rome)	KN Sum Rules
Mon., 14 April, 11.30 a.m. Lecture Theatre	Nimrod Lecture Series	Dr. Bialas (CERN)	A Study of the Reaction Mechanism in Three-Body Processes at Intermediate Energy.

External Events

EVENTS AT AERE

Tues., 1 April, 2 p.m. Conf. Rm., Bldg. 8.9	Theor. Phys. Seminar	Prof. J. Bilby (Sheffield)	Materially Uniform Simple Bodies.
Tues., 8 April, 2 p.m. Conf. Rm., Bldg. 8.9	Theor. Phys. Seminar	Prof. N.K. Sundaresan (Oxford)	An Introductory Talk on the Bethe-Salpeter Equation.
Wed., 9 April, 11.15 a.m., Conf. Rm., H.7.	Solid State and Materials Physics Colloq.	Prof. N.H. March (Sheffield)	Magnetic Field Dependant Dielectric Function of Electrons in Solids.

Social News

CHRISTIAN FELLOWSHIP - THIRTY MINUTE BREAK Friday 11th April.

Mr. E. Newbold will lead the Christian Fellowship in a quiet time of prayer in the P.L.A. Conference Room, Bldg. R.12. Come and join in at 12.35 p.m.

BETATOMIC '69

Tickets are available from the Cash Office, R.25 at 12/6 each for the dance which is being held at Harwell on Friday, 18 April 1969. Tickets from Cash Office only available up to Wednesday 2 April.

RECORD SOCIETY

There will be no meeting on 1 and 8 April. Details of next programme will be given in Bulletin No. 14/69.

Rutherford Laboratory
28.3..69

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