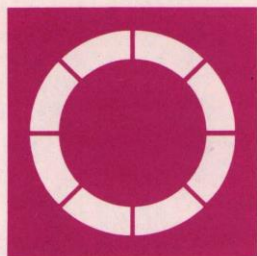


No. 39/68
4 Nov 68



Rutherford Laboratory Bulletin

General News

RADIATION PROTECTION NOTICE - FILM ISSUES. Period 12 commences Monday, 4 November. Colour Strip - YELLOW for $\beta\gamma$ and fast neutron films. Please change films promptly.

All those people who are now receiving TLD dosimeters, please make sure your last issue $\beta\gamma$ films are returned.

MISSING EQUIPMENT. A Marconi Wave Analyser, Ser. No. 521737, is missing from Bldg. R.1.

Will all Section Leaders please check their laboratories and workshops for this instrument.

If found, its whereabouts should be notified to Mr. E.W. Young, R1, Ext. 210.

VISITORS. Twenty members of the Queen Mary College Students Physical Society will visit the Laboratory on Saturday 9 November.

OVERSEAS VISITS. Dr. G. Manning, to CERN, 3-5 Nov., to attend EEC Meeting.

Mr. H.M. Foster and Mr. J.C. Mogford to CERN., 3-6 Nov., to investigate the operating conditions of the modular control rooms as used on the S.70 experiment.

Dr. J.M. Valentine, to CERN, 4-7 Nov., for discussions on CERN experiments.

Dr. G.H. Stafford to Geneva, 5-6 Nov., to attend meetings of the Nuclear Physics Research Committee and Main Organising Committee for the European Physical Society.

NEW SCIENTIST AWARD 1969. Nominations are invited for the New Scientist Award for 1969, which on this occasion is offered for outstanding achievement in the field of the physical or biological sciences. The closing date for nominations is Wednesday, 1 January 1969. Further information from H.F. Norris, R.20, Ext. 484.

CONFERENCE. An International Conference on Symmetries and Quark Models is to be held in the U.S.A. from 18-20 June 1969. Further information will be published when known.

Machine Schedules

NIMROD Cycle 12 (22.10.68 - 12.11.68)

Machine Physics; High Energy Physics (X1/K9, K11, K12, K13, K14, K8, K7, K10S & P7).

Full details of Cycle 12 were given in Bulletin No. 37/68.

PLA

Date	Team	Experiment
2-5 Nov	Oxford Univ.	$N^{15} (p, \alpha) C^{12}$ Reaction
6-7 Nov	RHEL	Detector Tests
8 Nov	(a) Radiation Protection Group	Neutron Flux Measurements
	(b) HEP (Dr. Bugg)	Scintillator Tests
9-12 Nov	Birmingham Univ.	Cross-section Measurements at 30 MeV

Internal Events

Mon. 4 Nov. 11.30 a.m. Lecture Theatre	Nimrod Lecture Series	Prof. J.E. Squires (Durham Univ.)	Is it Possible to Determine Resonance Positions.
Wed. 6 Nov. 11 a.m. Conference Rm, R1	H.E.P. Disc. Grp.	Dr. G. Ringland (RHEL)	Conspiracies and Forward Peaks
Wed. 6 Nov. 12.40 p.m. Thurs. 7 Nov. 1.15 p.m. Lecture Theatre.	Film		"Six Candles", a 22 min. British Insurance Association film.

This film was produced by the British Insurance Association in close co-operation with the police and the Royal Society for the Prevention of Accidents, as a contribution to road safety. It has an unforgettable message for pedestrian and motorist alike.

Mon. 11 Nov. 11.20 a.m. Lecture Theatre.	Nimrod Lecture Series	Prof. P.G. Murphy (Manchester U)	Photoproduction of K^0 Mesons
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External Events

Mon. 4 Nov. 4.15 p.m. Queen Mary Coll. London	Theor. Phys. Seminar	Dr. T.W.B. Kibble (Imp. Coll.)	Coherent States and Infra-Red Divergences.
Mon. 4 Nov. 4.15 p.m. Clarendon Lab., Oxford.	Elementary Particle Theory Seminar	Prof. R.E. Cutkosky (Cambridge & C.I.T.)	Analysis of Differential Cross Section Data.
Mon. 4 Nov. 5.0 p.m. Univ. of Bristol	Phys. and Geophys. Colloq.	Prof. V.Z. Peterson (Hawaii, visiting RHEL)	CP Violation and the Neutral Kaon System

Tues. 5 Nov. 2 p.m.
New Lecture Theatre

Daresbury Lecture
Series

Dr. K. Johnson
CERN

"The CERN Intersecting Storage
Rings"

Tues. 5 Nov. 2.30 p.m.
21, Banbury Rd., Oxford.

Nuclear Phys.
Seminar

Dr. E.K. Warburton
(Brookhaven and
Oxford)

Title to be announced.

Wed. 6 Nov. 2.30 p.m.
Univ. of Manchester

Theor. Phys.
Seminar

Dr. J.M. Irvine
(Manchester)

The Nuclear Not-so-many Body
Problem.

Wed. 6 Nov. 3 p.m.
Univ. of Cambridge

H.E.P.
Seminar

K. Koller
(Imp. Coll.)

Infinite - dimensional Representation
of the Lorentz Group : & Review.

Thurs. 7 Nov. 4 p.m. Univ.
Coll. London

Elementary Particle
Seminar

Dr. M.J. Esten

The Experimental Programme for the
Gargamelle Heavy Liquid Bubble Chamber.

Thurs. 7 Nov. 8.30 p.m.
21 Banbury Rd., Oxford

Seminar in Elementary
Particle Physics

Dr. C. Michael
(RHEL)

The Relation Between Regge Poles and
Low Energy Resonances.

Fri. 8 Nov. 4.30 p.m.
Queen Mary Coll., London

Particle Phys.
Seminar

Prof. A.W. Wolfendale
(Durham)

Nature of Cosmic Rays Underground

EVENTS AT A.E.R.E.

DEMONSTRATION. The new Series II version at the Compact Data Logger will be demonstrated by Solatron in Bldg. 488 on Tuesday, 5 November. Anyone interested in this instrument is asked to contact Mr. G. Biddle, Ext. 72 - 4251 on Monday, 4 November to arrange a visit to this demonstration.

Tues. 5 Nov. 2 p.m.
Conf. Rm. Bldg. 8.9

Theor. Phys.
Seminar

Dr. P.K. Kabir
(RHEL)

Weizsäcker - Williams Revisited

Thurs. 7 Nov. 3.30 p.m.
Conf. Rm., Bldg. 7.21

Nucl. Phys.
Colloq.

Dr. E.J. Winhold
(Rensselaer Poly-
technic Inst., Troy,
N.Y. & AERE)

Photomention Emission at Energies
Above the Giant Resonance.

Social News

RECORD SOCIETY. Tues. 5 Nov., at 12.30 p.m. Lecture Theatre.
The first concert in the winter season opens with 'Introduction to Phase 4 Stereo'. All are welcome.

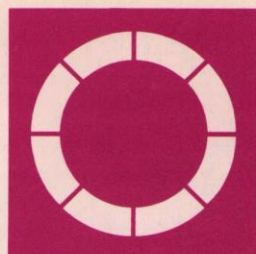
CHRISTIAN FELLOWSHIP. Fri., 8 Nov., 12.30 p.m., P.L.A. Conf. Rm. R12.
Bible Study, subject "God". All are welcome.

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

Rutherford Laboratory

1.11.68.

No. 40/68
11 Nov 68



Rutherford Laboratory Bulletin

General News

VISITORS. Thirty members of the Westfield College Students Physical Society will visit the Laboratory on Saturday 16th November.

RADIATION PROTECTION NOTICE - FILM ISSUES. Period 12 commenced Monday, 4th November. Colour Strip - YELLOW for $\beta\gamma$ and fast neutron films. Please check that you are wearing the correct films and return all old films.

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

Marconi Signal Generator, Type TF 885/A/1, Ser. No. JA 367/023, Loan Pool No. LP 1007.

It was borrowed from Lab 1-22, R.1, approximately eight weeks ago for a period of a few days. Would the borrower or anyone else with information on its present whereabouts please contact Mr. K.W. Taylor, Building R.1, Ext: 6255, as soon as possible.

INTERNAL SEMINAR. A one day Seminar is being held on the 'Future Development of Automatic Bubble Chamber Film Measurement', in the Lecture Theatre, on Wednesday, 13th November.

At the time of going to press the programme had not been finalised so it is not possible to give the time of commencement.

The tentative agenda for the seminar is as follows:

- (a) Status reports on semi-automatic devices now in operation or commissioning stage in British groups.
- (b) A discussion on the possible future development of these devices.
- (c) The potentials and problems of minimum guidance.
- (d) A report on the Argonne Conference on Automatic Measurement.
- (e) Problems of large and high resolution chambers.
- (f) Discussion of possible third generation machines.

A detailed programme will be available shortly and this and the time of commencement can be obtained from Dr. I. Butterworth, R.1, Ext: 248 or the Bulletin Editor, R.20, Ext: 484.

CONGRATULATIONS to Mr. I.W. Salter, A.E.O. who joined the Laboratory as an S.A. in January 1963, and has been awarded an Upper Second Class Honours Degree in Applied Physics at the University of Aston in Birmingham.

COMPUTER SHUTDOWN. The central computer will be closed for air conditioning plant maintenance from 07.45 a.m., Friday 8th November until 4 p.m. Monday 11th November.

OVERSEAS VISITS. Dr. L.C.W. Hobbs, to CERN, 10-12 Nov., to attend meeting of the 300 GeV Steering Group and for discussions on ejection studies at the CPS.

Machine Schedules

NIMROD Cycle 13 (12.11.68. - 3.12.68.)
Machine Physics
High Energy Physics

Team	Beam	Experiment	
Oxford U.	K 10 S	Study of $K^- p \rightarrow$ Neutral Final States for K^- Momenta in the range 0.6 - 1.8 GeV/c	Data
UCL/RHEL	K 8	Measurements of $K^- p$ Differential Cross-sections between 0.85 and 2.2 GeV/c	Data
Imp.Coll/Southampton U.	π^- 7	An Investigation of Narrow Bosons produced in $\pi^- p$ Collisions	Setting up
AERE/QMC/RHEL/Bergen U. (Norway)	P 7	Study of p-p Elastic Scattering in the range 1.5-4.0 GeV/c	Setting up

In addition to the above experiments, either the Heavy Liquid Bubble Chamber (X2/K11) or the National Bubble Chamber (X1/K9) will have a data run during the cycle.

P.L.A.

Date	Team	Experiment
11-12 Nov.	Birmingham Univ.	Cross-section Measurements at 30 MeV
13-14 Nov.		Maintenance
15-20 Nov.	Queen's U. Belfast & Westfield Coll.	Cross-section Measurements on B^{10} (p, He^3) Be^3 Reaction at 50 MeV.

Internal Events

Mon., 11 Nov., 11.30 a.m. Lecture Theatre.	Nimrod Lecture Series	Prof. P.G. Murphy (Manchester U.)	Photoproduction of K^0 Mesons.
Wed., 13 Nov., 11.00 a.m., Conf. Rm., R.1.	HEP Disc. Group	Dr. C. Michael (RHEL)	Deuteron as a Target at High Energies.
Wed. 13 Nov., Lecture Theatre	One-day Seminar	Future Development of Automatic Bubble Chamber Film Measurement. (for details see 'General News' section).	
Thurs., 14 Nov., 1.15 p.m. Fri., 15 Nov., 12.40 p.m. Lecture Theatre	Film	"Paint" a 25 min. colour film produced by the Shell Film Unit and released earlier this year.	

A history of paint from Neolithic times (when the cave painters used pigments in animal fat), to Mesopotamia (natural pigments, bitumen-based), Egypt (Egyptian blue, the first synthetic pigment) and through Greece and Rome to medieval art and the breakthrough into oils by the Flemish School. So the film continues through to modern times and industrial uses; a story covering thousands of years.

Mon., 18 Nov., 11.30 a.m., Lecture Theatre.	Nimrod Lecture Series	Dr. J. Walker (CERN)	Vector Dominance
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External Events

Fri., 8 Nov., 4.30 p.m. Queen Mary Coll., London.	Particle Phys. Seminar	Prof. A.W. Wolfendale (Durham)	Nature of Cosmic Rays Underground
Mon., 11 Nov., 5 p.m. U. of Bristol	Phys. and Geo. Phys. Colloq.	Prof. A.R. MacIntosh (Tech. U., Lyngby, Denmark)	Magnetism in the Rare Earth Metals
Tues., 12 Nov., 2 p.m. Lecture Theatre, Daresbury.	Daresbury Lecture Series	Dr. G. Culligan (Oxford)	An Experiment on K^+ Semi-Leptonic Decays
Wed., 13 Nov., 3 p.m. U. of Cambridge.	H.E.P. Seminar	Dr. G. Ringland (R.H.E.L.)	Conspiracies and Forward Peak Phenomenology
Wed., 13 Nov., 7 p.m. Lecture Theatre, Culham Lab.	I.E.E. District (Oxford) Meeting	H. Hill (B.A.C. Ltd.)	Development on Concorde
Thurs., 14 Nov., 4.15 p.m. Clarendon Lab., Oxford.	Theor. Phys. Seminar	Dr. E. Obryk	Classification of Three-Particle States
Thurs., 14 Nov., 4 p.m. U.C.L. London.	Elementary Particle Seminar	Dr. R.E. Cutkosky	Analysis of Differential Cross-section Data

EVENTS AT A.E.R.E.

Tues. 12 Nov., 2 p.m. Conf. Rm., Bldg. 8.9.	Theor. Phys. Seminar	Dr. J. Hubbard	Phonons in Liquids
Thurs. 14 Nov., 3.30 p.m. Conf. Rm., H.8	Nucl. Phys. Colloq.	Dr. E.K. Warburton (Brookhaven and Oxford)	Gamma Ray Nuclear Spectroscopy: ^{22}Na , an Example.

Social News

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

RECORD SOCIETY. Tues, 12 Nov., 12.30 p.m., Lecture Theatre.

Records of Russian orchestral music, including the Overture and Polovtsian Dances from "Prince Igor" by Borodin, and the colourful "Russian Easter Festival Overture" by Rimsky-Korsakov (stereo) conducted by Matačić.

CHRISTIAN FELLOWSHIP. Fri., 15 Nov., 12.30 p.m., P.L.A., Conf. Room, R.12.

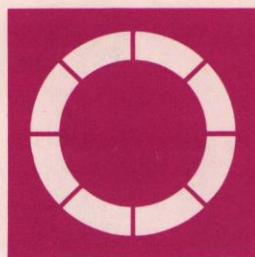
Bible Study on "Christ", led by Dr. J. Herbst of the H.E.P. Electronics Group. All are welcome.

AERE DRAMATIC SOCIETY presents "Barefoot in the Park", by Neil Simon at 7.45 p.m. in the Social Club on Wed., Thurs., Fri. and Sat., 20 - 23 November inclusive. Tickets at 3/6 from:- R.F. Childs, R.2, Ext: 6615, A.P.F. Watterston, R.1, Ext: 270 and Mrs. E.M. Moseley, R.1, Ext: 263.

Rutherford Laboratory
8.11.68.

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

No. 41/68
18 Nov 68



Rutherford Laboratory Bulletin

General News

RADIATION PROTECTION NOTICE - FILM ISSUES. It is Period 12. Colour Strip - Yellow for β and fast neutron films. Please make sure you are wearing the correct films.

EUROPEAN PHYSICAL SOCIETY. Inaugural Conference, Florence, 8-12 April, 1969. The theme of the conference will be "The Growth Points of Physics". Lectures by invited speakers will cover the following topics: Astronomy, Astrophysics, Cosmology and Relativity; Nuclear and Elementary Particle Physics; Atomic, Molecular and Plasma Physics; Physics of Condensed Matter; Quantum Electronics and Optics.

Application forms may be obtained from the Secretariat European Physical Society, P.O. Box, 1227 Carouge, Geneva, Switzerland. Detailed arrangements will be announced at a later date.

OVERSEAS VISITS. Mr. A.G. Parham, to CERN, 18-22 Nov, in connection with background studies on P.S. with ISR Experiments. Mr. T.J. Packer, to CERN, 18-23 Nov, to discuss problems of magnet power supply ripple.

Machine Schedules

NIMROD Cycle 13 (12.11.68 - 3.12.68)

Machine Physics: High Energy Physics (K10S, K8, π^7 & P7)
Full details of Cycle 13 were given in Bulletin No. 40/68

P.L.A.

Date	Team	Experiment
18-20 Nov	Queen's U. Belfast & Westfield Coll.	Cross-section Measurements on $B^{10}(p, He^3)Be^3$ Reaction at 50 MeV.
21 Nov	RHEL (Tschalar)	Straggling distributions and Range Corrections due to Multiple Scattering.
22-24 Nov	RHEL (Batty)	Preliminary "D" Parameter Measurements in Al^{27} and Co^{59}

Internal Events

Mon, 18 Nov, 11.30 a.m. Lecture Theatre	Nimrod Lecture Series	Dr. J. Walker (CERN)	Vector Dominance
Wed, 20 Nov, 11a.m. Conf. Rm, Bldg. R1	HEP Disc Group	Prof. A. Cromer (N.E. Univ. Boston, Mass, & AERE)	Proton - Proton Elastic Scattering and the Structure of the Proton
Wed, 20 Nov, 12.40 p.m. Thurs, 21 Nov, 1.15 p.m. Lecture Theatre	Film	"Crown of Glass", a 16 min, colour film, made by Shell.	

One of the major building achievements in this country, recently was in the new Catholic cathedral at Liverpool. The "Crown of Glass" is concerned with the stained-glass windows and the new method used at Liverpool by John Piper and Patrick Rentiens. They are shown selecting colours then working on the full sized cartoon on the studio floor. The glass is cut and bonded to adjoining pieces and the concrete framework by epoxy-resin. The film closes with some shots of the glass from within the tower and a panoramic view of Liverpool, the city with a new crown.

Wed, 20 Nov, 2.15 p.m. Lecture Theatre	Nimrod Proposal Lecture	Dr. D.H. Reading (RHEL)	$K_S^0 \rightarrow \pi^+, \pi^-, \pi^0$
Mon, 25 Nov, 11.30 a.m. Lecture Theatre	Nimrod Lecture Series	Dr. G. Charpak (CERN)	Report on Spark Chamber Developments given at Versaille Meeting.

External Events

Mon, 18 Nov, 4.15 p.m. Univ. of Oxford	Elementary Particle Theory Seminar	Mr. J.D. Dorren (Oxford)	Models for High Energy Scattering.
Mon, 18 Nov, 5 p.m. Univ. of Bristol	Phys & Geo-Phys Colloq.	Dr. C. Humphreys (U. of Oxford)	The Inelastic Scattering of High Energy Electrons by Crystals (Title to be announced)
Tues, 19 Nov, 2.30 p.m. 21 Banbury Rd, Oxford.	Nuclear Phys. Seminar	Dr. E.K. Warburton (Brookhaven & Oxford)	
Tues, 19 Nov, 7.30 p.m. Univ. of Reading	IERE Thames Valley Meeting	G.C. Howell (RHE, Farnborough)	Electronics Control of Aircraft and Missiles.
Wed, 20 Nov, 3 p.m. Cavendish Lab. Cambridge.	HEP Seminar	Dr. I. Butterworth (RHEL)	(Subject to be announced)
Wed, 20 Nov, 2.30 p.m. Univ. of Manchester.	Joint Seminar; Theor Phys & Nucl. Phys Grp	Prof. J.S. Blair (Surrey and Washington)	Excitation of Isobaric Analogue States in Nuclei
Thurs, 21 Nov, 8.30 p.m. 21 Banbury Rd, Oxford	Seminar in Elementary Particle Physics	Dr. N. Cottingham (Birmingham)	Diffraction Processes
Fri, 22 Nov, 4.30 p.m. Queen Mary Coll. London	Particle Phys. Seminar	Dr. W.H. Range (Liverpool)	Photoproduction of π^0 and η Mesons in the Energy Range 1 to 2 GeV

EVENTS AT AERE.

Tues, 19 Nov, 2 p.m.
Conf. Rm, Bldg. 8.9

Theor Phys
Seminar

Dr. J.L. Martin
(King's Coll.
London)

Functional Integration and the Transfer Matrix
or How to Make the Ising Model Difficult

DEMONSTRATION. M.B. Metals Ltd. will demonstrate their 5000 Series Data Logger in Bldg. 488 on Wed, 20 Nov, Anyone interested is asked to contact Mr. G. Biddle, Ext. 72-4251, to arrange a visit to this event.

Thurs, 21 Nov, 3.30 p.m.
Conf. Rm, H.8

Nucl. Phys.
Colloq

Dr. I. Butterworth
(RHEL)

Meson Resonance Review.

Social News

RECREATIONAL SOCIETY. The decoration of Bldg. R.14 is now nearing completion and will be open from 12 noon until 2 p.m. each day from Monday to Friday, commencing on Monday 18 November, for relaxation during the lunch hour. Entry will be by the BACK DOOR at present as the end lounge is still to be decorated.

RECORD SOCIETY. Tues, 19 Nov, 12.30 p.m. Lecture Theatre.

"A Night in Dixieland Hall"

There are probably only two places in New Orleans today which produce the incomparable true jazz in the old traditional style, - and Dixieland Hall is one of them. Situated in Bourbon Street in the New Orleans French Quarter, it is a favourite haunt of the really dedicated jazz musicians who drop in each evening for a session.

CHRISTIAN FELLOWSHIP. Fri, 22 Nov, 12.30 p.m. P.L.A. Conf. Rm.

A meeting for meditation and prayer to which all are welcome.

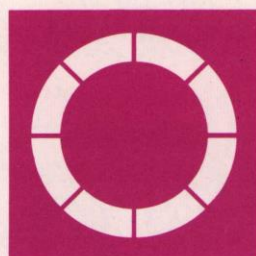
H.F. Norris, Ext. 480,
Scientific Admin. Group
Building R.20.

Rutherford Laboratory

15.11.68

bjg

No. 42/68
25 Nov. 68



Rutherford Laboratory Bulletin

General News

THE INTERLAB CO-OPERATION SCHEME. The Rutherford Laboratory is now a member laboratory of INTERLAB. This is a co-operation scheme between research and development laboratories whereby each laboratory agrees, within reasonable limits, to help other member laboratories with any problem with which it is competent to deal. For further information, please contact F.M. Telling, Building R.20, Ext. 6285.

RADIATION PROTECTION NOTICE - FILM ISSUES. It is Period 12. Colour Strip - YELLOW for $\beta\gamma$ and fast neutron films. Next film change - Monday, 2 December.

WINTERSCHOOL. The Institute for Theoretical Physics, University of Graz, Austria have announced details of their eighth annual winterschool for nuclear physics. The school is being held at Schladming Styria, Austria from 24 February to 8 March 1969. The subject will be "Particle Physics". The topics will include: Regge Pole Analysis, Recent Developments in Current Algebras, Effective Lagrangians, Electromagnetic and Weak Processes, Electromagnetic Mass Differences, Experimental Tests of P, C and T, Hamiltonian Approach to Quantum Field Theor etc. Closing date for applications - 20 December, 1968. Further details from H. F. Norris, R.20, Ext. 484.

OVERSEAS VISITS. Dr. I. Butterworth and Dr. C. M. Fisher to CERN, 27 - 28 Nov., for discussions on the High Field Bubble Chamber Proposal.
Mr. D. A. Gray, to CERN, 27 Nov., to attend meeting of the Magnet Study Group.
Dr. J. T. Hyman, to Saclay, 28 - 29 Nov., for discussions on computer control systems.

CERN COURIER. Copies of the Journal published by the European Organisation for Nuclear Research are freely available on request. The Journal contains news of activities in sub-nuclear physics and accelerator technology, particularly concerning CERN itself but also covering other Laboratories. If you wish to be added to the distribution list, send your name and address to H. F. Norris, Building R.20.

Machine Schedules

NIMROD Cycle 13 (12.11.68 - 3.12.68)
Machine Physics: High Energy Physics (K10S, K8, π^7 , and P7)
Full details of Cycle 13 were given in Bulletin No. 40/68

P.L.A.

<u>Date</u>	<u>Team</u>	<u>Experiment</u>
25-26 Nov.		Maintenance.
27 Nov. - 6 Dec.	King's Coll. London and Chelsea Coll.	(a) Total Cross-Section Measurements, $p^{\pm} C^{12}$ at 20 - 50 MeV. (b) (p,p) and (p,p') Reactions on Sm^{148} at 50 MeV. (c) (p,p) Reactions on Ni^{62} and Ni^{64} at 30 MeV.

Internal Events

Mon., 25 Nov., 11.30 a.m., Lecture Theatre	Nimrod Lecture Series	Dr. G. Charpak (CERN)	Report on Spark Chamber Developments given at Versaille Meeting.
Mon., 25 Nov., 2 p.m. Lecture Theatre			Nimrod Users Meeting.
Wed., 27 Nov., 11 a.m. Conf. Rm. Bldg.R.1	H.E.P. Disc Grp.	Dr. B. R. Martin (U.C.L.)	Low Energy $\bar{K}N$ and Pion-Hyperon Interactions, and the Kaon-Nucleon Coupling Constants.
Thurs., 28 Nov., 1.15 p.m. Film Fri., 28 Nov., 12.40 p.m. Lecture Theatre			"European Organisation for Nuclear Research", a 20 minute colour film.

In March this year a new film of CERN was shown. Many request have been received for a repeat. Please note change of showing dates for this week.

Mon., 2 Dec., 11.30 a.m., Lecture Theatre	Nimrod Lecture Series	Dr. S. Goldsack (Imp. Coll.)	10 GeV K^- Interactions.
Mon., 2 Dec., 2 p.m. Conf. Rm. Bldg. R.1	Special Lecture	Dr. K. Igi (CERN)	Crossing Symetric Regge Behaved Amplitude for πN Scattering and its Predictions.

External Events

Mon., 25 Nov., 4.15 p.m. Clarendon Lab., Oxford	Elementary Particle Theory Seminar	Dr. G. Barton (Sussex)	Photon Absorption Sum Rule and the Non- Relativistic Quark Model.
Mon., 25 Nov., 4.15 p.m. Queen Mary Coll., London	Theor. Phys. Seminar	Dr. W. Götze (Munich)	Dispersion Theory of the Kondo-Effect.
Mon., 25 Nov., 6 p.m., I.E.E., Savoy Place, London	IEETE Lecture	J. N. Prewett (Central Elect. Research Labs)	Automation in Power Systems.
Tues., 26 Nov., 10 a.m., at the City Univ. St. John Street, London, E.C.1: Inst. of Maths. Symposium on "The Industrial Training of Mathematicians." Speakers - Mr. J. I. Sonn, Dr. P. G. Wakely, Mr. A. M. Dobson and Mr. N. Kerruish.			
Tues., 26 Nov., 2 p.m. Lecture Theatre, Daresbury	Daresbury Lecture Series	Prof. J. G. Davies (Jodrell Bank)	Pulsars.
Wed., 27 Nov., 2.30 p.m. Univ. of Manchester	Theor. Phys. Seminar	Dr. A. D. Boardman (Salford)	Monte Carlo Calculations of Electron Distribution Functions
Wed., 27 Nov., 3 p.m. Univ. of Cambridge	H.E.P. Seminar	Dr. D. Lyth (Lancaster)	Regge Trajectories from the N/D Method.
Thurs., 28 Nov., 4 p.m., Univ. Coll. London	Elementary Particle Seminar	Dr. D. B. Martin	Low Energy \bar{K} -N and π -y Interactions and the KN Coupling Constant.
Thurs., 28 Nov., 4 p.m., Clarendon Lab., Oxford	Theor. Phys. Seminar	Prof. B. H. Bransden (Durham)	Rearrangement Collisions.
Thurs., 28 Nov., 4 p.m. Univ. of Birmingham	Mathematical Physics Seminar	Dr. A. D. Martin (Durham)	Helicity Amplitudes
EVENT AT AERE			
Tues., 26 Nov., 2 p.m. Conf. Rm., Bldg. 8.9	Theor. Phys. Seminar	Prof. D. Bohm (Birkbeck Coll. London)	Notions on Space and Time.

Social News

CHESS CLUB. The Laboratory chess club played an away match at Didcot on Thursday, 14 Nov. and beat the home team by $5\frac{1}{2}$ to $4\frac{1}{2}$. N. M. Stewart, W. Glasgow, C. Uden, A. Slater, and M. Davies all won their games and G. Dunkin came away with the only draw. The club is eager to challenge other teams in the locality, meanwhile the annual tournament is well under way and it is hoped to give some news very shortly.

RECORD SOCIETY. 12.30 p.m., Tues., 26 Nov., Lecture Theatre.

Works by Mozart (for those who have waited so patiently!).
Symphony No. 34 in C, and the Oboe Concerto.

Stereo recordings by Colin Davis and the Sinfonia of London, with Leon Goossens as the soloist.
(These programmes are open to all, and we should be glad of your support and interest)

CHRISTIAN FELLOWSHIP. 12.30, p.m. Fri., 29 Nov. P.L.A. Conf. Rm., R.12

"Jesus Christ - the Purpose of His Coming".

Bible Study led by Dr. L. J. Herbst of the H.E.P. Electronics Group. All are welcome to this and to any of the Fellowship's meetings.

Rutherford Laboratory

22.11.68

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