



Rutherford
Laboratory

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2NBEGIN, NTK, NTRY, NMISS, NSSR, NFID, MAXMIM, NFIRST, ...
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S NCF(16), IFS, NFS, FX, FY, JK, PIC, KPIC, NCU, NBIN, MAXQV, MAX
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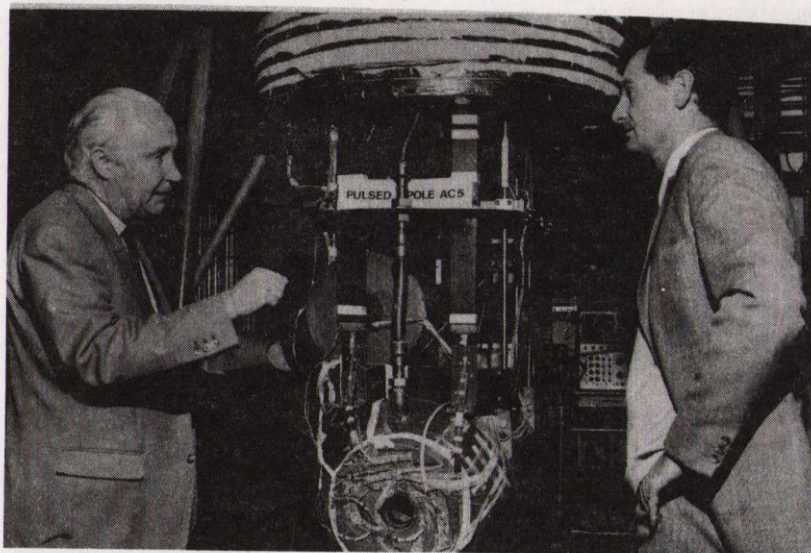
24 November - 8 December 1975

FLYING VISIT

Seen here with Applied Physics Div Head David Thomas, during a flying visit to the Rutherford Laboratory, is CERN 1 Director - General, Prof. Willi Jentschke.

As well as giving a lecture on the current CERN experimental programme, Professor Jentschke also look at the development work in Superconducting technology being done at the Lab.

'We are very interested in the development of this work', said the CERN Director-General, 'and we have discussed some areas of possible future co-operation.'



HEALTH & SAFETY AT WORK The Health and Safety Act, based largely on the findings of the Robens Committee, introduces industrial safety legislation which covers most kinds of working environment. In particular, the Act provides for the establishment of two new national bodies, the Health and Safety Commission and the Health and Safety Executive.

The Commission is empowered to consist of a chairman and up to nine members representing employers' and employees' organisations and local authorities.

The Executive is responsible for implementing the Commission's advisory functions and for enforcing the relevant statutory provisions of the Act and the regulations made under it.

The Nuclear Installations Inspectorate is one division of the Executive and Branch 5 of the N.I.I. is responsible for the inspection of the Laboratory and neighbouring establishments.

Mr Sydney Smith of Nuclear Branch 5 will be visiting the Laboratory on Monday December 1st to give a lecture (see Internal Events) on the worth of the Executive and how it relates to the Laboratory. The

Lecture and the discussion following it should be of interest to all safety conscious persons.

Prof. W D Allen will chair the discussion and would welcome written questions prior to the date of the meeting.

RUTHERFORD LABORATORY LECTURE Less than a month

ago John Davoll gave an extremely interesting talk in this series, which questioned the amount of energy we need. The next and last talk until the New Year will deal with the production of energy.

Ian Glendenning, a member of the Energy Studies Group at the CEBG's Marchwood Engineering Labs will give a talk on 'Non-Nuclear Power: The Potential of Nature'.

After referring briefly to sun, wind, tidal and geothermal sources, he intends to concentrate on wave power since this is the most promising long-term non-nuclear energy for the UK.

In view of the recently revived (& revised) Severn tidal barrier scheme which seems to have aroused a lot of interest, one suspects

that the question time could develop into a lively affair.

NUCLEAR PHYSICS BOARD TO VISIT LABORATORY Most of the members of the SRC's Nuclear Physics Board

who will be visiting the Lab on Monday and Tuesday 25-26 Nov are no strangers to the site, although the Board does include one or two new faces. Among the exhibits lined up for them to see are the new K p elastic scattering experiment, the K p → AK⁰ transition study, the stopped K experiment to investigate kaonic atoms, the measurement of polarisation effects and asymmetry in KN scattering, the new Nimrod injector and the rapid cycling vertex detector.

Highlight of the second day's proceedings will be the unveiling of a portrait of the late Lord Bridges - former chairman of the Nat. Institute for Research in Nuclear Science - by the present Lord Bridges. The portrait has been donated by Dr T G Pickavance and will hang in the R1 Coffee Lounge.

Because of this ceremony, the Coffee Lounge will be closed from 11.30 - 1500 hours.

INTERNAL EVENTS

NIMROD LECTURE SERIES

Monday, 24 November
11.30
Lecture Theatre

Right-handed Currents for the Weak Interaction?

Dr R L Kingsley/RL

HEP SEMINAR

Wednesday, 26 November
11.00
R61 Conference Room

Photo-absorption, Vector Dominance and Shadowing

G Shaw/Manchester

HEP DATA HANDLING SECTION SEMINAR

Wednesday, 26 November
13.30
R61 Conference Room

The use of On-line Computers in the Study of Brain Disease.

D Small/National Hospital for Nervous Diseases

SEMINAR IN COMPUTING

Friday, 28 November
11.00
R61 Conference Room

ELECTRIC - Past, Present and Future

T G Pett, C S Cooper/RL

Dr T G Pett will talk about the changes that have been made to the ELECTRIC system in recent months. These include the introduction of various levels of monitoring, changes to improve performance, some new facilities and operational changes. Current developments and plans for the future will then be discussed.

Dr C S Cooper will describe the "one-user" system (this does not mean that only one user can log-in at a time!), including its anticipated benefits to performance and to future program development.

NIMROD LECTURE SERIES

Monday, 1 December
11.30
Lecture Theatre

Title to be confirmed.

Dr N E Booth/Oxford

HEALTH & SAFETY AT WORK LECTURE

Monday, 1 December
14.00
Lecture Theatre

The Health and Safety Executive

S Smith/Nuclear Installations Inspectorate

HEP DATA HANDLING SECTION SEMINAR

Wednesday, 3 December
13.30
R61 Conference Room

Packet Switching

C Solomonides/N.P.L.

FILM SHOW

Thursday, 4 December
13.00
Lecture Theatre

Bronze, a 13 minute colour film from Canada showing the creating of the monumental bronze work of sculptor, Charles Dandelin.

These are my People, a 15 minute colour film from Canada, made by an Indian film crew, reflecting on the impact of the white man's arrival on Indian life. (See note in news section about showing times).

RUTHERFORD LABORATORY LECTURE

Thursday 4 December
15.15
Lecture Theatre

Non-Nuclear Power : The Potential of Nature

I Glendenning/Energy Studies Group, CEGB, Marchwood Engineering Labs.

NIMROD LECTURE SERIES

Monday, 8 December
11.30
Lecture Theatre

A Study of Double Pomeron Exchange Processes at the ISR

Dr B Shen/CERN

STOP PRESS

At last a chance to learn what goes on behind the scenes in a high-energy physics experiment. A big experiment - like S120 recently run at CERN - is a team effort which involves all kinds of people as well as physicists.

On Tuesday 2 December at 3.15 in the Lecture Theatre, Chris Damerell will explain how a great variety of people worked together and what the physicists have found out as a result of this team effort.

EXTERNAL EVENTS

ELEMENTARY PARTICLE THEORY SEMINARS/NP DEPT.OX.- 1430 hrs
 28 Nov: Prof R H Dalitz - Baryon Spectroscopy Old and New
 5 Dec: Dr X Artra/CERN-Classical Description of High-Energy Processes In the String Model.

COLLOQUIA/CLARENDON LAB - 16.15 hrs
 28 Nov: Prof D B Fitch/Cornell - The Resonance Raman Effect.

LOW TEMP & SOLID STATE PHYS.SEMINAR/CLARENDON LAB-1430 hrs
 27 Nov: Dr J H Beaumont - Solid State Spectroscopy using Synchrotron Radiation (EXAFS)

ELEMENTARY PART.PHYS.SEMINAR/NP DEPT.OXFORD - 1430 hrs
 27 Nov: Mr I Kirkbride - Chicago-Harvard-Illinois-Oxford Inelastic Muon Scattering Results.
 Dr W S C Williams - Inelastic Electron Scattering at the Stanford Electron/Photon Conference.

THEORETICAL PHYSICS SEMINAR/CLARENDON LAB -1615 hrs
 27 Nov: Prof J S Rowlinson-Penetrable-Sphere Model of Phase Transitions.

PHYSICS DEPT.COLLOQUIA/JJT PHYS.LAB.READING U. - 1700 hrs
 24 Nov: Mr P Poncet - Neutron Scattering from Molten Salts
 1 Dec: Dr D Shoenberg/Camb.-Recent Work on the De Haas-Van Alphen Effect.

HEP SEMINAR/4th FLOOR SEMINAR ROOM MANCHESTER U.-1600 hrs
 4 Dec: T G Walker/RL -Associated Protection in the Resonance Region.

THEOR.PHYS.SEMINARS/MANCHESTER U. -1430 & 1615 hrs
 27 Nov: Prof C Domb/King's-The Droplet Model & Metastable States.
 3 Dec: Prof W F Viner/Birm. - to be announced.

THEORETICAL SEMINARS AT QMC - 1615 hrs
 24 Nov: Dr I G Halliday/IC - Solitons & the Ergodic Hypothesis.
 1 Dec: Dr M A Moore/Sx -The Possible Phases of Superfluid He³.

NUCLEAR PHYSICS SEMINAR AT SURRY U. - 1400 hrs
 3 Dec: Prof Mghaux/Liege - Many-Body Theory of Nuclear Matter.

HEP SEMINAR/CAMBRIDGE U. - 1500 hrs
 27 Nov: Dr D Wallace/Soton-Renormalization Group Methods on a Lattice.

PHYS.& GEOPHYS.COLLOQUIA/ROYAL FOR.BRISTOL U.-1700 hrs
 24 Nov: Dr M Anderson-Oscillations & Return Periods in Geomorphology
 1 Dec: Dr A B Lidiard/AERE-Materials Physics in Nuclear Power Reactors.

THEOR.& HEP SIMINARS/SOUTHAMPTON U. - 1430 hrs
 28 Nov: Dr D M Scott/RL -Field Theory Models for High Momentum Transfer Processes.
 5 Dec: Dr J M Charap/QMC-Torsian-A New Twist in Relativity.

LOW TEMP & SOLID STATE SEMINAR/SUSSEX U.-1415 hrs
 2 Dec: Dr M Ertl-Thermoelectric & Thermomagnetic Refrigeration.

ATOMIC,LASER & PLASMA SEMINAR/SUSSEX U.-1415 hrs
 27 Nov: Dr M Houghton/Soton-A Topic in Plasma Physics.

PART.PHYS & FIELD THEORY SEMINAR/SUSSEX U. -1615 hrs
 1 Dec: D Broadhurst/Open U.-Confining Quarks in Bags.

THEORETICAL PHYSICS SEMINAR/SUSSEX U. -1615 hrs
 27 Nov: Dr B Gyarff/Bristol -The Possibility of Observing P-Wave Superconductivity.

THEORY SEMINARS/DARESBURY LABORATORY - 1400 hrs.
 24 Nov: Prof R Bullough/UMIST -Solitons.
 1 Dec: J E Inglesfield/Cavandish-Surface Plasmons & Surface Energy of Metals.

DARESBURY LECTURE SERIES - 1400 hrs
 25 Nov: C Wilkin/UCL-Pion Nucleus-Interactions-are they all Garlic and Chocolate?

NP DIV COLLOQUIUM/CONF.RM.HANGER 8, AERE -1530 hrs
 27 Nov: J M Robertson - Heat Transfer and Fluid Flow.

NIMROD SCHEDULE

CYCLE 9 25.11.75 - 22.12.75

MACHINE PHYSICS

HIGH ENERGY PHYSICS

Team	Beam	Experiment	State
BRISTOL/SOTON/RL	K15a	No 120: K^- differential cross-sections.	setting up
CAMB/RL	$\pi 12$	No 114: $\pi^+p \rightarrow K^0 \Lambda^0$ differential cross-sections and polarisation.	Data
BIRM/SURREY/RL	K17	No 113: Experiments with stopping Kaons.	Data
IMP.COLL/RL	$\pi 8a$	No 128: Meson production near threshold.	Tests
RL.	$\pi 11$	No 154: Radiobiological Experiment.	Data
OXF/ROME/RL	T1	Test beam facility.	Tests
RL.	K18	No 119: $S = -2$ Baryon Resonances using a rapid cycling vertex detector.	Hall 1 Installation
QMC/RL	K20	No 136: Polarisation in K^+n elastic & charge exchange scattering.	Hall 1 Installation

LETTER OF THANKS The Personnel Office has received a letter from Mrs Humphrey expressing her appreciation for the flowers, condolences, and collection made on her bereavement. Mr C Humphrey worked for the Nimrod Engineering Division at Rutherford Laboratory from 1960 to 1974.

RUTHERFORD LABORATORY BULLETIN

Published by the Scientific Administration Group

Editor: H F NORRIS

Deadline
for
Insertions

1000 hours Wednesday 3 December

Room 42 Building R20
Rutherford Laboratory
Chilton Didcot Oxon
Abingdon 21900 Ext 484

MISSING EQUIPMENT The following item of equipment was last seen in Room 1.35 R25 when it was a local computer terminal room - 10" Desk Fan (gray) numbered? AERE 8545,14/1082. M J Newman, R25,Ext 356 seeks information on the present whereabouts of this item.

Lost from R6 area - 1'Black & Decker' 'Workmate' Bench - coloured blue & marked 'R6 ELECT Workshop', in black marker ink. Information please to P Swan-Taylor,R6,Ext 6300 or A P Childs,R51,Ext 6690.

Lost, one large cardboard box containing 12 grey cables approx 9 metres in length, with 41 way Francelco plugs at one end and 41 way McMurdo sockets at the other. They may have been delivered/collected from the R12 workshop in error. If anyone has received this box, which must weigh about 50 lbs, Mr J H Hunt, R 36, Ext 6637 would like to know - urgently.

FILM BADGE NOTICE It is Period -2. Colour Strip - BLUE - for Bγ films and neutron packs.

Please check that you are wearing the correct dosimeter and that all old ones are returned.

OVERSEAS VISITS Mr D C Salter, to ILL Grenoble, 24-28 November for discussions on high pressure systems and technical liaison with ILL staff.
Dr W Venus, to the USA, 1-15 December for test run on TST experiment and to visit FNAL.
Mr J Penfold, to ILL Grenoble, 4-19 December to participate in tests on polarising mirrors & experiment on D3 apparatus.
Dr C J S Damerell, to CERN, 7-12 December, to attend meeting and work on experiments.
Dr J B Forsyth, to ILL Grenoble, 8-20 December to carry out neutron beam experiments on D5 and D3 apparatus.

SOCIAL NEWS

BEST WISHES LARRY Larry Couling took ill some two weeks before he was due to retire at the end of August from Nimrod Vacuum Section.

Larry joined the Vacuum Section in October 1960 from AERE having previously been a driver for almost 30 years. He became a member of the shift team of experimental workers testing and commissioning the Nimrod Vacuum System. After 5 years he was promoted Non Tech III and took charge of Vacuum Section Store and Maintenance records as well as supervising vacuum testing and maintenance of Nimrod pumping units during shutdowns. There was not much Larry didn't know about the store, or the location and state of equipment and his knowledge is already badly missed.

Since the usual opportunity to show appreciation of Larry's service was denied his colleagues by his illness, it was with considerable pleasure that they learned he was so much recovered that a few of them were able to pay him a surprise visit at his usual hostelry. A pair of sheepskin seat covers for his car was handed to him on behalf of all his former colleagues with best wishes for a long and happy retirement and continued improvement in his health.

FILMS & RECORDS There appears to be some confusion regarding the starting times for lunch time films and, for the Record Society concerts. Whenever possible both these events are timed to start at 12.40, however official events (lectures, seminars, conferences, courses etc) have priority. The film shows are at fortnightly intervals on alternative Thursdays & Fridays. That is the commitment. All one can do is to squeeze films in between official events.

The Record Society concerts being produced locally can be switched around, although they will be presented whenever possible on Tuesdays, at 12.40. If still in doubt phone, the Editor

CHRISTIAN FELLOWSHIP Friday, 28 November. All are welcome to listen to a tape recording of the Rev. James Philip, minister of Holyrood Abbey Church, Edinburgh, at 12.30 in the R12 Conference Room.

Friday 5 December. 'What have the EMPTY CITIES of the past to say to us today? All are welcome to this film which is being shown at 12.45 in the Lecture Theatre. The narrative and pictures of this colour film explore the recently discovered ruins of the Maya and Inca civilisations revealing many of their achievements in medicines, astronomy and mathematics. Why did they decline and what are their descendants like today? Other interesting questions are asked regarding the concept of 'primitive man' progressing ever upward.

Advance Notice. The annual Carol Service, led by members of the Salvation Army band at Abingdon will be held in the Lecture Theatre at 12.45 on Friday 19 December.

POPPY APPEAL The total collection at the Rutherford Laboratory (including Atlas) was £73.93, exceeding the previous year by £22.43. Once again, the 'mostest' came from an RL collection box, the amount, £21.51 almost equalling last years all time record. The organisers send their thanks to all collectors and contributors.

FOREIGN EXCHANGE? A French family seeks an English family with a view to establishing contacts between their children. The parents are 35 and 40 years old and their children, both boys, are 13 and 14.

Please write to: G Barlet, Institut Laue-Langevin, 56X Centre de TRI, 38,042 Grenoble, Cedex, France.

CHRISTMAS DANCE The Recreational Society Christmas Supper Dance will be held in the Laboratory Restaurant on Friday 12 December, 8 - 1. By popular request, the return of the 'Chordets'. Tickets (Buffet supper included) at £1 on sale 24 November from: Val Goodwin, R1, David Evans, R34 & Peter Craske, R2. You are advised to buy your ticket quickly - a heavy demand is expected!

RECORD SOCIETY On Tuesday 25 November, the word is 'JAZZ' with records of Louis Armstrong and his Hot Five (period - 1926). A change of mood for Tuesday 2 December when "Elisabeth Schwarzkopf sings Operatta". Both concerts start at 12.40 in the Lecture Theatre. All are welcome so why not come in and relax for a while?

SOCCER Rutherford Cup Final.

C & A Division I, R25 I.

In an evenly matched but scrappy game of football the Rutherford Cup's fate was not decided at the first attempt.

R25, with the wind at their backs kept C & A under early pressure. Midway through the first half R25 took the lead with a magnificent solo effort from John Mackerness. They nearly extended their lead before half-time when Steve Hancock thundered in a dipping volley which struck the crossbar.

C & A with the wind advantage in the second half attacked more frequently and Steve Farr in the R25 goal, made several notable saves. However he stood no chance when Jim Taylor, having created a shooting position for himself, hit an unstoppable drive into the roof of the net. Jim might have settled the game up a few minutes later but this time his shot struck the post.

In the end a draw was a fair result and a replay will be needed (date not fixed at time of going to press) to settle the issue.