



Rutherford
Laboratory

20 January-3 February 1975

bulletin 2

SHORT ENGINEERING COURSES AT READING COLLEGE OF TECHNOLOGY

Course	Meetings	Time	Starting Date
Applications of Semi conductors	Eight	1900-2115	Monday 20 January 1975
Electrical and Electronic Projects	Eight	1900-2115	Thursday 23 January 1975
Industrial Applications of the Thyristor	Six	1900-2115	Tuesday 14 January 1975
Logic and Switching Circuits	Four	1900-2115	Tuesday 25 February 1975
Solid State Triggering Devices	Four	1900-2115	Wednesday 26 February 1975

Enquiries should be made to Training Section, Building R20, ext. 266.

RUTHERFORD LABORATORY LECTURE

The title of the lecture to be given at 15.15 on Thursday 30 January by Dr M F Land of the School of Biological Sciences, University of Sussex is:- "Visual guidance and pursuit mechanisms of Insects in flight".

Dr Land has kindly provided the following abstract:-

Many species of Insects either mate in flight, or catch other Insects. This performance requires very rapid and precise control of course, which is mediated by vision. Using film analyses of the flightpaths of chasing and chased flies it has been possible to reconstruct some of the "rules" by which this coordination is achieved.

OVERSEAS VISITS

Dr G E Kalmus, to CERN 20-22 January to attend T.C Bureau and T.C.C Meeting.

Messrs H O Normington, C Page and C Smith, to CERN, 20-31 January to dismantle the Muon Experiment on I.S.R.

Dr N H Lipman and Prof E H Bellamy to CERN, 21-24 January for discussions on the Neutrino Experiment.

Mr D A Gray to CERN 26-28 January to attend ECFA Plenary Meeting.

Dr G H Stafford to CERN 26-27 January to attend ECFA Plenary Meeting.

FILM BADGE NOTICE

It is Period 1, 1975 Colour Strip BROWN for 8y films and neutron packs.

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

The neutron packs now in use must be returned as soon as Nimrod shuts down for the long maintenance period. If any dosimeters are found would you please return them to the Film Service, Building R2, (Mrs Coates, ext 430) with a note indicating when and where found. This is very important as it is possible that dosimeters may have been lost in a high radiation area.

INTERNAL EVENTS

NIMROD LECTURE SERIES
Monday 20 January
11.30
Lecture Theatre

Theories with Interacting Pomerons
Dr L Caneschi/CERN

HEP SEMINAR
Wednesday 22 January
11.00
R61 Conference Room

Statistical Bootstrap and Multiparticle Processes
Dr C Hamer/DAMPT Cambridge

PROPOSAL TALKS
Thursday 23 January
10.30, 11.15 and Noon
Lecture Theatre

PROPOSAL NO. 161
"A Proposal to Study K^-p Interactions in BEBC at 45 and 65 GeV/c"
GLASGOW/SACLAY/RL

The talk will be given by Dr K Paker.

PROPOSAL NO. 162
"A Study of $\bar{p}p$ Interactions at 5.7 and 2.6 GeV/c using the TST Facility in the ANL 12ft Bubble Chamber"
ARGONNE/CARNEGIE-MELLON/MELBOURNE/RL

The talk will be given by Dr W A Venus.

PROPOSAL NO. 163
"A Proposal to Search for Short-Lived Particles produced in neutrino interactions in emulsion using an emulsion-spark chamber hybrid system"
BRUSSELS/DUBLIN/FNAL/ROME/STRASBOURG/UCL

The talk will be given by Professor E H S Burhop.

NIMROD LECTURE SERIES
Monday 27 January
11.30
Lecture Theatre

K^-p Interactions at 14.3 GeV/c
Dr K Paker/RL

HEP SEMINAR
Wednesday 29 January
11.00
Lecture Theatre

Extraction of $K\pi$ phase shifts from the reaction $K^+n \rightarrow K^+\pi^-p$ at 2-3 GeV/c using various absorption models
R Campbell/Imp College

SEMINAR IN COMPUTING
Friday 31 January
11.00
Conference Room R12

"The GEC 4080 Interactive Graphics Computer"
C Adams

The Laboratory has recently purchased a GEC 4080 Computer to handle present and future interactive graphics requirements. Part of its role will be to replace the DDP 224 and IDI display.

RUTHERFORD LABORATORY LECTURE
Thursday 30 January
15.15
Lecture Theatre

Visual guidance and pursuit mechanisms of insects in flight.
Dr M F Land/Sussex

RUTHERFORD LABORATORY BULLETIN

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Deadline
for
Insertions

GENERAL & SOCIAL NEWS
Tuesday 1600

INTERNAL & EXTERNAL EVENTS
Wednesday 1200

Room 42 Building R20
Rutherford Laboratory
Chilton Didcot Berks
Abingdon 1900 Ext 484

EXTERNAL EVENTS

MANCHESTER UNIVERSITY

THEORETICAL PHYSICS SEMINARS/NEILS BOHR COMMON ROOM - 14.30 hours
 22 January: The ψ (J) Particles - What, Why and Possible Where -
Professor A Donnachie/Manchester
 29 January: Cusps, Rainbows and Interference Effects In Atomic Scattering from
 Surfaces. *Dr M V Barry/Bristol.*

DARESBUURY LABORATORY

DARESBUURY LECTURE SERIES - 1400 hours
 28 January: Does e^+e^- Annihilation Into Hadrons look like $p\bar{p}$ Annihilation Into
 Hadrons. *Dr H Muirhead/Liverpool.*

BRISTOL UNIVERSITY

PHYSICS & GEOPHYSICS COLLOQUIA/ROOM G12, ROYAL FORT - 1700 hours
 20 January: A New Look Through Glass. *Dr K H G Ashbee/Bristol*
 27 January: Low temperature thermometry - simple systems, politics and the
 approach to the absolute scale. *Prof Clayton, A Swanson/Iowa*
State University and N.P.L.
 3 February: Experiments on gravitation. *Prof A H Cook/Cambridge.*
 16.45 hours

OXFORD UNIVERSITY

THEORETICAL PHYSICS SEMINAR/CLARENDON LABORATORY - 16.15 hours
 23 January: Transport properties of polymers in solution. *Dr B. U. Felderhof/QMC.*
 30 January: Low energy pion nucleus scattering. *Dr C Wilkin/UCL.*
 LOW TEMPERATURE & SOLID STATE PHYSICS SEMINARS/CLARENDON LABORATORY - 14.30 hours
 23 January: Excitons at High Densities. *Dr R M MacFarlane/IBM California.*

AERE HARWELL

NUCLEAR PHYSICS DIVISION SEMINAR/CONFERENCE ROOM, BLDG 8.9 - 15.30 hours
 23 January: Neutron Cross Section Measurements at N.B.S.
Dr R B Schwartz/N.B.S and N.P.D.

SURREY UNIVERSITY

NUCLEAR PHYSICS SEMINARS - 14.15 hours
 22 January: π -Nucleus Elastic Scattering
S Phatak/Manchester.

SOUTHAMPTON UNIVERSITY

THEORETICAL & HIGH ENERGY PHYSICS SEMINARS - 14.30 hours
 24 January: Field Theories of Quark Binding
Dr H Osborn/Cambridge.
 31 January: A Consistent Theory of OFF Mass Shell States In the Dual Model
Dr D Fairlie/Durham

QUEEN MARY COLLEGE

THEORETICAL PHYSICS SEMINARS - 16.15 hours
 20 January: Markov fields and Feynman integrals in Euclidian space.
Prof R F Streater/Bedford College
 27 January: The pseudo-potential concept, origin and applications.
Prof R McWeeney/Sheffield
 3 February: Coherence and non-linear optics
Prof R London/Essex

NIMROD SCHEDULE

CYCLE 13 3.1.75 - 30.1.75

		MACHINE PHYSICS	HIGH ENERGY PHYSICS
<u>Team</u>	<u>Beam</u>	<u>Experiment</u>	<u>State</u>
RUTHERFORD LABORATORY	$\pi 11$	Beam Measurements	Tests
IMPERIAL COLLEGE/RL	$\pi 8A$	Experiments on Narrow Bosons X^0 (958)	Data
BEAM DETECTOR GROUP	K15A	Parasitic Running	Tests
COUNTER GROUP B/ CAMBRIDGE UNIVERSITY	$\pi 12$	$\pi^-p \rightarrow k^0 \Lambda^0$ In the Range 1.4 - 2.0 GeV/c	Data
RUTHERFORD LABORATORY	$\pi 9$	Polarisation in the $\pi^-p \rightarrow \pi^0 n$, nn	Data
BIRMINGHAM/SURREY/RL	K17	Study of X-rays from K^-p Atoms	Data

SOCIAL NEWS

CHRISTIAN FELLOWSHIP

Friday 24 January: All are welcome to come to a book review in the Conference Room, R12 at 12.30 pm.

Friday 31 January: Andrew Mathew, curate of Chilton Parish Church will be visiting the Rutherford Laboratory at 12.30 pm in R12 Conference Room. All are cordially invited to come along to meet him and listen to a short talk.

RUTHERFORD LABORATORY DANCE

ADVANCE NOTICE

The next dance in the Restaurant will be on Friday 28 FEBRUARY 1975.

For the incredibly low price of 80p you may dance to what is without doubt one of the best bands yet to play at the Rutherford Laboratory. The CHORDETS is an 8 piece band consisting of organ, drums, lead and base guitars, two trumpets, tenor and baritone sax, and if that's not enough, vocals are provided by the two guitarists and the trumpeters.

Tickets will be on sale shortly.