



Rutherford
Laboratory

16-30 July 1973

bulletin 26

BULLETIN NOTICE

Commencing this week the Bulletin will be published fortnightly until early September. Contributions for the next two issues dated 30 July and 13 August should be sent to Room 42, R20 by 25 July and 8 August respectively. Due to the Editor's absence telephone enquiries for the next five weeks should be directed to Mr F Harden, Ext 6114.

LECTURE THEATRE BOOKINGS

Please contact Mr C J Heming Ext 6607 for Lecture Theatre bookings during the next five weeks.

FILM BADGE NOTICE

Period 8 commences Monday 16 July. Colour Strip - PURPLE for $\beta\gamma$ films and neutron packs. Six monthly TLD issue for people with surnames commencing C D E F.

Please change all dosimeters promptly. It is very important that neutron packs are returned quickly, as they will not be developed if returned more than six weeks after the date of issue.

SCIENCE FAIR 73

Although the Oxford Science Fair will be well under way by the time this Bulletin is published there is still time to visit it on Friday 13 July - 10 a.m. to 5 p.m., Saturday 14 July - 2 to 5 p.m. and on Monday 16 July - 10 a.m. to 4 p.m. It is being held at the Oxford Polytechnic, Headington, and admission is free.

There are 57 stands at this year's Fair and browsing through the list of 'exhibits', one is impressed by the number and diversity of projects. Chipping Norton School for example, with eleven projects including 'Visual and Audio Perceptibility in Rats', 'Telephone Exchange' and 'Formula Ford Racing Car'. Then there is Leon School with 'Classroom Observations of Teaching Techniques' and 'Snail Habits'; the Cherwell School with 'Do flies know where home is' coupled with 'Music while you work' and, some really heavy stuff here, 'Nuclear Magnetic Resonance Spectrometer' from King's School Gloucester.

The more one studies the list the more it becomes obvious that the Oxford Science Fair, sponsored by the British Association for the Advancement of Science, with financial support from the Sunday Times and The Department of Trade and Industry, is well worth a visit.

BERKSHIRE MERCURY CELEBRATES 250 YEARS OF PUBLICATION

To commemorate 250 years of unbroken publication the Berkshire Mercury is issuing a 48 page supplement this week. In this section on the 'Mercury Country's work for the future', research at the RHEL is featured and a photo of the AC4 magnet is reproduced. A facsimile of issue No 1, July 8th 1723 is included which was known as the Reading Mercury or Weekly Entertainer, this later title being especially appealing when applied to page 4 which is headed 'The Weekly Bill of Mortality'.

'Suddenly - 1, is understandable; Horthoehead - 2, is not, but how about Teeth - 22.' Obviously highly recommended reading for the weekend.

OVERSEAS VISITS

Mr G T J Arnison, to CERN, 15 - 16 July for data taking on S124 Experiment.

Mr J Burren, to CERN, 16 July - 1 August for various discussions mainly concerned with the RHEL workstation.

Dr D P Jones, to CERN, 22 July - 17 August for work on S124 Experiment.

Dr M R Jane, to CERN, 27 July - 18 August to take part in data taking run on Omega neutron trigger experiment

INTERNAL EVENTS

EXPERIMENTALISTS SUMMER SCHOOL
15-27 July Inclusive
Lecture Theatre

The Lecture Theatre is fully booked during the period 15-27 July, from 09.30 - 17.45 daily. Lectures normally given in the Lecture Theatre are being transferred to Conference Rooms.

NIMROD LECTURE SERIES
Monday 16 July
11.30
Conference Room, Building R1

Production of High Transverse Momentum Particles at the ISR.

Dr B Duff/UCL

APPLIED PHYSICS LECTURE
Monday 16 July
15.15
Conference Room, Building R1

Physics of Accelerators and Storage Rings - Part 4, Phase Oscillations, Synchrotron Radiation, Luminosity etc.

Dr J D Lawson/RHEL

HEP DISCUSSION GROUP
Wednesday 18 July
11.00
Conference Room, Building R1

Parton Model without Partons : An Introduction to Local Scale Invariance.

Gabor Domokos/John Hopkins University

HEP DIVISION SEMINAR
Friday 20 July
09.30 - 12.30
Conference Room, Building R12

Techniques for Momentum Reconstruction.

The following have agreed to speak :

Alan Bryden - Momentum Reconstruction in Bubble Chambers

Mike Jane - M7 Magnets

Ian Corbett - OMEGA and Mini OMEGA

Fred Wickens - M5 Magnets

John Malos - New Approaches to Momentum Reconstruction

NIMROD LECTURE SERIES
Monday 23 July
11.30
Conference Room, Building R1

The Role of the Pomeron in Multihadron Physics - A Global View

Dr H I Miettinen/RHEL

APPLIED PHYSICS LECTURE
Monday 23 July
15.15
Conference Room, Building R1

Physics of Accelerators and Storage Rings - Part 5

Dr J D Lawson/RHEL

SEMINAR IN COMPUTING
Friday 27 July
11.00
Conference Room, Building R12

The Analysis of a Spark Chamber Experiment (K13C)

J Hart and R Maybury

The K13C experiment to measure the differential cross-section for $\pi^-p \rightarrow AK^0$ is currently being analysed. Since the spark chambers were photographed in 3-view stereo, it is possible to perform track-finding in 3-dimensions. Preliminary experience with this method will be discussed.

This is the last seminar before the summer break, the series will resume in October.

EXTERNAL EVENTS

ELEMENTARY PARTICLE PHYSICS SEMINARS AT OXFORD

Wednesday 18 July, 14.30

Inelastic Muon Scattering at SLAC - *Professor G Chadwick/SLAC*

Thursday 26 July, 14.15

$\pi N \rightarrow \pi \pi N$ and Melosh Transformations - *Professor R G Cashmore/SLAC*

Both seminars in the Nuclear
Physics Lecture Theatre.

EVENT AT AERE

NUCLEAR PHYSICS COLLOQUIUM

Wednesday 18 July

15.30

Conference Room, Hangar 8

Super Novae and the Search Programme at Mount Palomar Observatory.

Professor W L W Sargent/Hale Observatories, California.

NIMROD SCHEDULE

CYCLE 7 17 7 73 - 5 8 73

MACHINE PHYSICS

HIGH ENERGY PHYSICS

<u>Team</u>	<u>Beam</u>	<u>Experiment</u>	<u>State</u>
BRISTOL/SOTON/RHEL	K15	π^+p Differential Cross-Sections	Data
CHURCHILL HOSPITAL/ BART'S MEDICAL COLLEGE/ RHEL	πN	Radiobiological and Ion Chambers Evaluation	Tests
COUNTER GROUPS A & C/ DETECTORS GROUP	$\pi 8$	Proposal Studies and Detector Evaluation	Tests
BIRMINGHAM/SURREY/RHEL	K17	Stopping Kaons	Setting up
CERN/ORSAY/OXFORD	P81	Hadron-Proton Spin	Setting up

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Deadline
for
Insertions

GENERAL & SOCIAL NEWS

INTERNAL & EXTERNAL EVENTS

Tuesday 1600

Wednesday 1200

Room 42 Building R20
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Chilton Didcot Berks
Abingdon 1900 Ext 484

SOCIAL NEWS

FIVE POUNDS WELL SPENT

Last year we were delighted to report that Sid Axford of the Mechanical Services Section R9, at his first attempt and at the age of 52 had won a 'gold' in the Auto-Cycle Union's National Rally, an event unique in the motor-cyclists calendar. We also reported that Sid had thoughts of going one better next year and attempt to win a premier award.

Well, this is 'next year' and his thoughts have come true. Last week-end he clocked up the maximum possible marks, 668 having covered the absolute maximum mileage of 600, in 24 hours earning 1 mark for each mile, and visited the maximum number of controls possible and earning 2 marks for each control visited.

Congratulations also to Tony Jeffries who as reported in last week's Bulletin, has only just left the site, and to Sid's son, both of whom kept the 'old man' company for the 23 hours they were in their respective saddles.

Sid was riding the same machine as last year, a 1960 350 cc Triumph he acquired for £5, his son was riding a 500 Suzuki and Tony his 650 Triumph. Sid (and Co) started from Ringwood this year so that meant a 70 mile stint before the start and the Rally finished at Doncaster, some 150 miles away. Anyhow Sid clocked up a grand total of 863 miles in under 36 hours.

The popularity of this ACU Rally is shown by the increased entry, from 876 last year to 930 this year, with teams from the Services, Metropolitan Police etc taking part. Sid says he is almost tempted to join the Army before next year's event, what with lorries and land-rovers carrying a mobile cook-house, bunks for sleeping in etc. We don't believe this, he is much too tough a competitor to worry about such luxuries. And 1974? another premier?

CHRISTIAN FELLOWSHIP

The Old Testament is full of prophecies concerning the birth, life, death and resurrection of Jesus Christ. Ernie Newbold will be leading the first of a new series of Bible Studies entitled 'Christ in the Old Testament' and will be talking on 'Christ in the Book of Exodus'. All are welcome to come along to the meeting which commences at 12.30 in the Conference Room, R12 on Friday 20 July.

A DIFFERENT TYPE OF RALLY

A member of the organising committee, one Peter Clee of R25 has assured me (the Editor) that the Woodcote Veteran Transport Rally on Saturday 21 July is the ideal day out for the family. Traction Engines, Veteran Cars, Commercials, Motor Cycles, Bicycles, Rural Crafts, Ploughing Horses etc its all there. Query - do these vehicles have plastic seats! More details on Yellow Posters or, bother Peter Clee.