RUTHERFORD Bulletin 17

11-25 October 1976

new Laboratory logo

"Lazy R"

RUTHERFORD *is here!*

by Gordon Fraser

This new masthead on the Bulletin doesn't just mean that stocks of the old heading have run out. It's the first public appearance of a specially-commissioned corporate image design which will now be incorporated into as many Laboratory publications and as many different applications as possible. As stocks of old headings run out, so they will be replaced by a new design making use of the new Laboratory symbol or 'logo'. Laboratory publications and publicity material will be produced using the distinctive new logo to make them immediately identifiable.

The old logo symbolising the Nimrod magnet segments and which used to be an integral part of the Bulletin masthead has been with us for many years, and it's about time there was a change. RL is now at a crossroads in its history when developments in the next few years will involve what are for us new fields of science and technology and will probably result in a substantial facelift for the Laboratory. The new design is an attempt to produce a corporate image framework which will allow for all these developments.

The final word belongs to the designers of the new logo: "Because of the complex nature of the Laboratory's activities, the totally different atmosphere of each existing research area, and the need to allow for future projects in new research areas, we consider it impossible to devise a mark which will have immediate visual significance."

"Even attempting to symbolise 'research' would lead us towards complicated and certainly old-fashioned, overused images."

"We have therefore come out in favour of a simple, semi-abstract form which utilises the letter 'R' set at a 45-degree angle to suggest the arrow shape and, in turn, progress and movement."

"Properly positioned in its application, it goes even further and gives the visual impression of pace and even of attempting to force its way sideways from its set position."

"Perhaps above all its utter simplicity gives it the advantage of initially compelling attention, and of memorability."

USERS MEETING

Among those addressing the next HEP Division users meeting on Monday 11 October will be CERN Research Director General Leon van Hove, who will describe the current CERN experimental programme. As well as developments at CERN and RL, the PETRA programme also appears on the Agenda this time. Full details in Internal Events on page 2.

BLOOD DONORS

The following message has been received from the Regional Organiser of the National Blood Transfusion Service following the recent blood donor clinic.

"I am sure you will be interested to learn that the two day blood donor clinic held at Chilton on 13th and 14th September was very successful, with a total of 193 reporting; 22 of these were new donors.

We look forward to a further visit to your establishment in approximately six months time."

INTERNAL EVENTS

USERS MEETING
Monday 11 October
1100
Lecture Theatre

1100 Future Arrangements for Computing at RL — *W Walkinshaw (RL)*
1200 The PETRA programme — *F Foster (Lancaster)*
1415 Financial Outlook — *G H Stafford (RL)*
1445 The CERN Experimental Programme and Future Developments — *L van Hove (CERN)*

HEP SEMINAR
Wednesday 13 October
1100
R61 Conference Room

Results from the Single Arm Spectrometer Experiment at Fermi Lab

J Litt/CERN

RUTHERFORD LABORATORY LECTURE
Thursday 14 October
1515
Lecture Theatre

Ion-Beam Fusion

R Arnold/Argonne

NIMROD LECTURE SERIES
Monday 18 October
1130
Lecture Theatre

Results from the CERN-Munich Polarised Target Experiment

G Lutz/CERN and Munich

HEP SEMINAR
Wednesday 20 October
1100
R61 Conference Room

New Evidence for Resonances in $\bar{p}p \to \pi^- \pi^+$

A A Carter/Queen Mary College London

NIMROD LECTURE SERIES
Monday 25 October
1130
Lecture Theatre

Lepton quark symmetries

J Pati/IC and Maryland.

IPCS

Annual General Meeting
1300 hours, Thursday 21 October
Lecture Theatre

RUTHERFORD LABORATORY LECTURE

NEW IDEAS ON FUSION RESEARCH

Next Rutherford Laboratory Lecture is at 15.15 on Thursday 14 October in the Lecture Theatre, where Dr Richard Arnold of Argonne National Laboratory will talk about ion-beam fusion, and will present some new ideas on taming thermonuclear fusion as a source of energy.

The idea is that compression, and heating to thermonuclear burn temperature of small fuel pellets, can be accomplished by heavy ion beams of multi-GeV energies, produced from accelerator-storage-ring combinations. Beam energies of megajoules can be produced, in principle, using essentially state-of-the-art technology developed for high energy physics research. With pellets of high fusion energy gain, practical power stations of Gigawatt capacity can be planned.

There's a good write-up about this work in the latest issue of the CERN Courier (September 1976, p 291). Dr Arnold is visiting the UK for a year, so there'll be ample time for learning more about this new development in the fusion field.

CHRISTIAN FELLOWSHIP

Meets at 12.35 in R12 Conference Room on the following Fridays:-
Oct 15, 22: Studies in Paul's Epistle to the Colossians, continued (Chapter 1, v23-27).
Oct 29: Rev Ben White, lately of Reading, will address the Fellowship on some stimulating topic.

FILM BADGE NOTICE

It is Period 11. Colour strip GREEN for $\beta\gamma$ films and neutron packs. Please check that you are wearing the correct dosimeters and all old ones are returned.

PEOPLE ....

DR STAFFORD is now a member of the DESY Scientific Council - which because of the PETRA project has now been extended to include scientists from other countries as well as Germany.

D A GRAY is now Chairman of the PETRA Machine Advisory Committee.

ALAN ASTBURY is now Chairman of the CERN Proton Synchrotron Committee.

MARTIN DONALD has left the Machine Theory Group to take up a job at the PEP storage ring project at Stanford, California.

TONY PARSONS has left the Advanced Apparatus Development Group to become Secretary of Daresbury Laboratory.

OVERSEAS VISITS

B J Charles, to CERN, 11-15 Oct, for discussions on on-line computing.
R J N Phillips, to CERN, 17-21 Oct, for discussions.
A R Mortimer & W T Smith, to DESY, 17-20 Oct, for international collaboration meeting on PETRA experiments.
N H Lipman, to Erice, Sicily, 16-31 Oct, to attend International Energetics School.
B R Diplock, to CERN 18 Oct - 1 Nov, to inspect e-gamma experiment prior to RL takeover.
G Kalmus & W Cameron, to CERN, 13-14 Oct, to attend collaboration meeting.
L C W Hobbis, to ILL, 11-15 Oct, to attend ILL Scientific Council Meetings.
P T Rumsby, to Paris, 17-23 Oct, to attend European conference on Laser Interactions.

WHO'S TAKING STEPS?

Will the person who removed the wheeled aluminium steps from the Heavy Lab R25 please return them to R G Fowler, Prep. Area R2.

UNIDENTIFIED GOODS

Two packets containing samples from Kigre Inc., Toledo, Ohio, USA are being held in Stores Receipts R56. The samples are of 3% doped Q-88 rod. Anyone with any knowledge of this consignment please contact R56, Ext. 412.

G4DRL CALLING ....

Amateur radio is the art and science of communication by radio with other people who share this interest - whether they are at the end of the street or the other side of the world. The Rutherford Amateur Radio Club, formed three years ago, is now equipped with telephony and telegraphy transmitters and takes part in world-wide communications under the call-sign G4DRL.

Amateur radio has no barriers of race, colour, creed or politics. As well as the 600,000 licensed radio amateurs throughtout the world, there are also many thousands of young people who, though not yet operating their own transmitter, share in the excitement and interest of amateur radio by listening to and building short-wave receivers, so gaining the knowledge and skill needed to obtain a licence.

Today, although many official stations use the short waves, certain parts of the short-wave spectrum are set aside by almost every country in the world for use by amateurs. In the United Kingdom alone there are over 20,000 people who hold a special licence from the Postmaster-General to operate an amateur transmitting station. There are even a number of enthusiasts who possess amateur stations fully equipped for transmitting their own television pictures.

Many well-known expeditions have used amateur radio stations to help keep them in touch with the world. For instance, the famous Kon-Tiki raft was regularly in contact with American and European amateur stations while it drifted across the Pacific Ocean. Many Artic and Antarctic exploration parties have taken along equipment to use on the amateur wavelengths. Amateurs have frequently provided emergency radio communications for towns sticken by disasters such as the earthquake in Guatemala.

Amateurs have designed, built and used their own communications satellites which have been put into orbit for them by the American Space Agency. They have also made contacts by bouncing signals off the moon and from meteor trails.

For further information on this fascinating hobby contact the Secretary of the Rutherford Amateur Radio Club, Arthur Braham, or the Chairman, Mike Hodges.

TYPING ERROR

An IBM electric typewriter, Serial No 923032692 and labelled RHEL 05018, is missing. Anyone with any information on this item - please contact Inventory Section, R20, ext 570.

SAVE ON XEROX

Xerox copying costs the Laboratory over £25,000 a year - that's roughly equivalent to £20 a year for every employee! Use the machines wisely and help cut Xerox costs.

NEW 195 COMPUTER

The new IBM 360/195 computer equipment is now under test, but installation cannot proceed until some modifications are made to the Atlas buildings. However this work is well advanced, and IBM is scheduled to bring over a specialist installation team from the US in late November to start installing the new equipment, which includes one Megabyte of core. Acceptance tests should take place with a minimum number of peripherals before the end of the year.

Early in 1977, the existing IBM 360/195 (called the 195/1 to distinguish it from the new 195/2) will be taken out of service, and its peripherals and two Megabytes of core will be transferred to the 195/2 to give a temporary three Megabyte service.

Later, the 195/1 and remaining equipment will be re-located in the Atlas building and the two processors linked to give a 2 times 2 Megabyte coupled system. Software is at an advanced stage of development and will be tested in a simulated coupled system. In this way most of the software is expected to be tested before the final machine configuration is ready.

SAY IT WITH FLOWERS

Among the forthcoming events organised by the British Nuclear Energy Society is a specially-invited lecture by Sir Brian Flowers on 'Nuclear Power and Public Policy'. Until 31 August, Sir Brian was chairman of the Royal Commission on Environmental Pollution which has recently issued its controversial report. Admission is by ticket only and early application is advised to the

British Nuclear Energy Society
Institution of Civil Engineers
1/7 Great George St
London SW1P 3AA

The lecture is on Thurs 2 Dec at 1800 hrs at the above address.

Laser Equipment Arrives!

100 METRES OF EQUIPMENT TO BE INSTALLED OVER THE NEXT FEW MONTHS.....

Seen here being delivered to the Laboratory is a complete 100 Gigawatt system for the new SRC Laser Centre at RL. The equipment arrived from Quantel of Paris early on Monday 4 Oct, and was offloaded by early afternoon.

Quantel staff are now on-site helping to instal the system, which was purchased on a turnkey basis. Installation and commissioning of the 100 Gigawatt system is expected to be complete by 5 November, when the first phase of single beam experiments will be able to commence.

After this, ILC of Sunnyvale, California, is scheduled to deliver to final amplifier units which will be assembled in the special clean room. In December, two supplementary amplifiers should arrive from Quantel, and simple two-beam experiments should be on the cards by early 1977.

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