

Nouvelles brèves

balt près des points d'intersection pour comprimer davantage les faisceaux en collision. Ces projets devraient être terminés à temps pour l'arrivée du détecteur CLEO II (voir numéro d'avril, page 106).

Changement au sommet

Boyce McDaniel a quitté à Cornell le 1er juillet son poste de directeur du Laboratoire d'études nucléaires Floyd R. Newman. Directeur du Laboratoire pendant 18 ans, il y a connu à la fois l'ère du synchrotron à électrons de 12 GeV et celle du collisionneur électron-positon CESR. En 1972, alors en congé de Cornell, il fut chef de la Division Accélérateur au Laboratoire Fermi au moment de l'entrée en service de l'accélérateur de 400 GeV (à l'époque). McDaniel est membre de l'ICFA (Comité international pour les futurs accélérateurs) et président du Comité de surveillance pour le projet américain du super-collisionneur supraconducteur (SSC). Il reste professeur de physique à Cornell.

Le nouveau directeur de Cornell est le physicien Karl Berkelman.

Pour l'avenir du CERN

Présidé par Carlo Rubbia, un Groupe de travail sur l'avenir scientifique et technologique à long terme du CERN a été créé pour explorer les diverses options relatives à l'avenir à long terme du CERN, prenant en considération les installations existantes (infrastructures), soulignant leurs avantages et inconvénients respectifs; ces options devraient être élaborées en tenant compte de limitations réalistes sur le plan financier et du personnel.

Les membres de ce groupe sont Giorgio Brianti (CERN), Pierre Darriulat (CERN), Gosta Ekspong (Suède), Carlo Rubbia (Président), Abdus Salam (Royaume-Uni), Samuel C. Ting (MIT), Simon van der Meer (CERN) et Gus Voss (DESY). J. Sacton, président de l'ECFA, assistera aux réunions du Groupe en qualité d'observateur. La première réunion s'est tenue le 5 juin.



Carlo Rubbia – les yeux tournés vers l'avenir du CERN!

Neutrino massif?

Un grand point d'interrogation pèse encore sur le problème de la masse du neutrino. Cette particule est-elle réellement de masse nulle, se déplaçant à la vitesse de la lumière, ou possède-t-elle une quelconque masse faible? Depuis un certain temps, de petites expériences d'étude de la désintégration bêta, effectuées à Moscou et ailleurs, suggèrent que le neutrino d'électron possède une masse de l'ordre de 20 à 45 eV.

Le spectre d'énergie de l'électron émis dans la désintégration bêta constitue un révélateur sensible de la masse du neutrino; en effet, la forme exacte de l'extrémité supérieure de ce spectre dépend de la masse du neutrino d'électron. Par contre, dans un rapport récemment publié, John Simpson (Université de Guelph, Ontario, Canada) fait part de l'observation d'une distorsion à l'autre extrémité du spectre d'énergie de la désintégration bêta du tritium. Simpson, qui étudie la désintégration du tritium depuis quatre ans, attribue cet effet à un neutrino massif (17,1 keV). Une telle masse, bien que minime par rapport à celles d'autres particules (l'électron, si léger, "pèse" 511 keV), est sans précédent dans la famille des neutrinos et ne manquera pas de fournir matière à réflexion pour les théoriciens.

Constant Tièche

Constant Tièche, ancien chef en retraite de la Division des Finances et artisan d'une grande partie de l'administration financière du CERN, est décédé le 27 mai.

Mervyn Hine prend sa retraite

Mervyn Hine, l'un des membres fondateurs du CERN, a pris sa retraite à la fin du mois de mai. Il arriva au Laboratoire, en même temps que le regretté John Adams, en 1953, et joua un rôle majeur dans la conception, la construction et la mise en service du synchrotron à protons de 28 GeV.

Après l'achèvement de la machine, il assumait pendant dix ans des responsabilités majeures dans la hiérarchie du CERN en travaillant avec les directeurs généraux Adams, Weisskopf, Gregory et Jentschke. Victor Weisskopf, en particulier, a rendu hommage à Hine comme ayant été le moteur du travail de la Direction du CERN à cette époque.

Il a contribué à l'essor des accélérateurs, aux présentations de projets, à l'établissement de procédures financières et à promouvoir le développement de l'infrastructure du Laboratoire (par exemple, l'utilisation de grands ordinateurs, les réseaux, les lignes de transmission de données à grande vitesse et la bureautique). Sa réflexion et son intuition ont aidé le CERN à être prêt pour l'arrivée du futur.

Mervyn Hine est un des pionniers qui ont créé le CERN et aidé à façonner ce caractère particulier dont le Laboratoire bénéficie aujourd'hui.

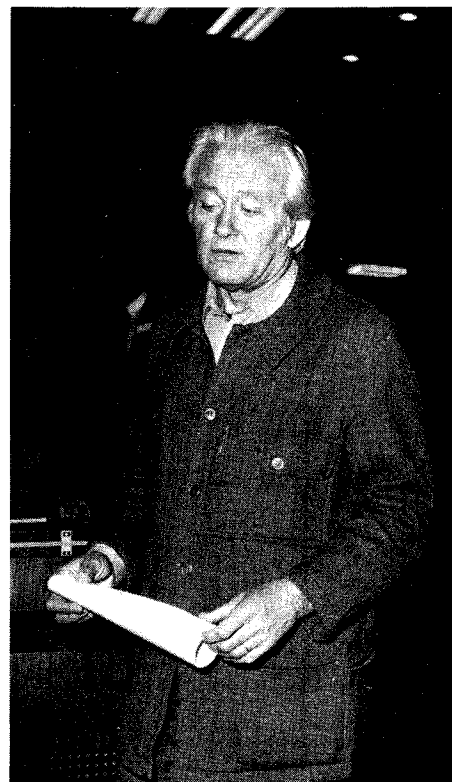
Mervyn Hine.

ATLAS à Argonne

Le premier accélérateur supraconducteur d'ions lourds du monde ATLAS (Argonne Tandem Linear Accelerator System) a été inauguré le 3 juin. Ce nouveau linac augmente les énergies des particules issues d'un Van de Graaff tandem et permet d'élargir utilement l'éventail des études de physique nucléaire existant à Argonne. Des machines similaires sont en construction dans les Universités de Floride et du Kansas.

Distinction

Le spécialiste des détecteurs Georges Charpak du CERN a été récemment élu membre de la prestigieuse Académie des sciences française.



Georges Charpak.





The nuclear physics section of NIKHEF, the Netherlands' National Institute for Nuclear and High-Energy Physics, has openings in the PIMU group for

TWO EXPERIMENTAL PHYSICISTS

at the postdoc level, who are interested to participate in the research of the group on pion absorption in nuclei and on pion charge exchange in pionic atoms. The experiments are performed at the pion muon facility in Amsterdam and in some cases abroad.

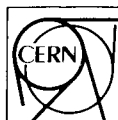
Several years of research experience in nuclear or (intermediate energy) particle physics are required, while a strong background in particle detection techniques and/or data processing (hardware/software) is desirable.

The duration of one contract is two years. For the other one it is one year with a possibility of one year prolongation. The appointment will be with the Foundation for Fundamental Research on Matter (FOM).

Information can be obtained from Dr. R. van Dantzig, tel. (020) 5920120 or 5922008.

Candidates are invited to apply within two weeks after appearance of this advertisement, while enclosing a curriculum vitae, also mentioning performed research and names of referees, to

Prof. Dr. G. van Middelkoop,
Scientific Director of NIKHEF,
section K, Postbox 41882,
1009 DB Amsterdam, Netherlands.



European Organization for Nuclear Research
European Laboratory for Particle Physics
Organisation Européenne pour la Recherche Nucléaire
Laboratoire Européen pour la Physique des Particules

The Experimental Physics Division intends to make an appointment to the position of a

PHYSICIST

in experimental particle physics research. Candidates are expected to have an excellent record of successful work in this field, and to have the ability to provide leadership. The appointment will be made for a fixed term, and may subsequently become permanent.

The holder will play an important role in all aspects of the conception and design of experiments, and of the construction and operation of detectors, and the development of on-line and off-line software and the analysis of data.

Please send letters of application, including the names of three referees, list of publications, a brief curriculum vitae and a brief description of research interests, to the

**Leader of the Experimental Physics
Division,
CERN, 1211 Geneva 23, Switzerland
quoting reference EP/RE, before 5.8.85.**

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Duties: Reporting to the Laboratory Director, the Deputy Director for General Sciences provides overall direction for Laboratory divisions in high energy physics, nuclear physics, accelerator physics, and fusion research. Major responsibilities include management oversight of these divisions, coordination of interdivisional programs and activities, establishment and implementation of goals consistent with the Laboratory's mission, interaction with policy and advisory committees to ensure the highest quality of scientific achievement, and management liaison with the University of California, the U.S. Department of Energy, and other external agencies.

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Please submit two copies of resume including salary history and names and addresses of references to:

**Chairman, Search Committee
LAWRENCE BERKELEY LABORATORY,
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Building 90, Room 1012, Berkeley, CA 94720.**

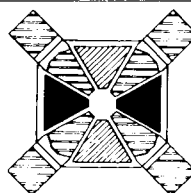
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RESEARCH SCIENTIST POSITION IN EXPERIMENTAL NUCLEAR PHYSICS AT INDIANA UNIVERSITY

The Department of Physics at Indiana University invites applications for a project tenure-track position in experimental nuclear physics, to start in Fall, 1985, or early 1986, at the Indiana University Cyclotron Facility (IUCF). IUCF is a national user facility which provides intermediate-energy light-ion beams affording excellent opportunities for forefront experimental research, which is supported and complemented by the Nuclear Theory Center located in the cyclotron laboratory. Upon completion of the electron cooled proton storage ring now under construction, beams of unprecedented quality will be available for precision nuclear research and the application of novel experimental techniques. The position of Research Scientist comprises a 3-rank system at Indiana which is equivalent in structure and promotion criteria (with the exception of teaching duties) to the regular faculty ranks. Although opportunity for part-time teaching exists, the primary emphasis is upon research. Project tenure, when conferred, is with respect to the IUCF contract. Applicants must have a Ph.D., at least one year of post-doctoral experience, and should have demonstrated outstanding potential to lead a vigorous independent research program. Appointment at the Assistant Scientist level is anticipated, but appointment at higher rank will be considered for appropriate candidates. Salary will be commensurate with qualifications, experience, and rank. Applicants should submit a curriculum vitae, publication list, copies of recent publications, and arrange for three letters of recommendation to be sent to:

**Dr. W.W. Jacobs
Indiana University Cyclotron Facility
2401 Milo B. Sampson Lane
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as soon as possible, before the closing date of September 15, 1985.

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UNIVERSITY OF OXFORD

Department of Nuclear Physics

Appointment of Research Officer

The department will shortly appoint a Research Officer in Particle Physics. Whilst mainly a research appointment, the appointee will be required to undertake seventy-two hours a year of laboratory demonstrating and he/she will be encouraged to give graduate lectures. The research programme of the experimental particle physics group includes the Soudan II search for proton decay, a major contribution to the DELPHI detector for LEP (CERN), preparation for an experiment at HERA (DESY), and development of an indium detector for solar neutrinos.

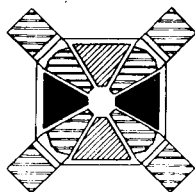
The appointment will be for three years with possible extension to five years. Salary will be on the lecturer scale £7520 – £15 390 (under review).

Applications with the names and addresses of two referees should be sent to

**Mr. M.S. Gautrey,
Department of Nuclear Physics,
Keble Road, Oxford**

from whom further particulars may be obtained.

The closing date is September 5 1985.



DIRECTOR OF THE INDIANA UNIVERSITY CYCLOTRON FACILITY

Applications are invited for the directorship of the Indiana University Cyclotron Facility (IUCF). IUCF is a major and growing national users' facility for intermediate-energy nuclear science with light ion beams. We seek a distinguished nuclear scientist to provide scientific leadership for the laboratory and its program. The director will serve a five-year term starting in the summer of 1986 and will receive a tenured full professorship in the Department of Physics. The five-year term of the directorship will see the start of experimental work with a new electron-cooling storage ring and the development of plans for the future growth of the facility. Salary will be commensurate with experience and qualifications. Applications with a complete resume, including the names of four references, and nominations should be sent as soon as possible, but not later than Nov. 1, 1985, to

**Professor S. E. Vigdor,
Chairman, Search and Screen Committee,
Research and Graduate Development
Bryan Hall 104, Indiana University,
Bloomington, Indiana 47405.**

Indiana University is an Affirmative Action/Equal Opportunity Employer and encourages applications from women and minority candidates.

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The successful candidate must have a PhD in nuclear or particle physics as well as research experience in this area as evidenced by a record of recent publications, with extensive background using detectors, computers and electronic equipment.

Applicants are requested to submit a curriculum vitae, list of publications and the names of at least three referees to:

**Dr. Janis M. Dairiki, c/o Employment Office,
Mail Stop 90-1042,
LAWRENCE BERKELEY LABORATORY,
Berkeley, CA 94720
as early as possible.
Refer to Job # A/3407.**

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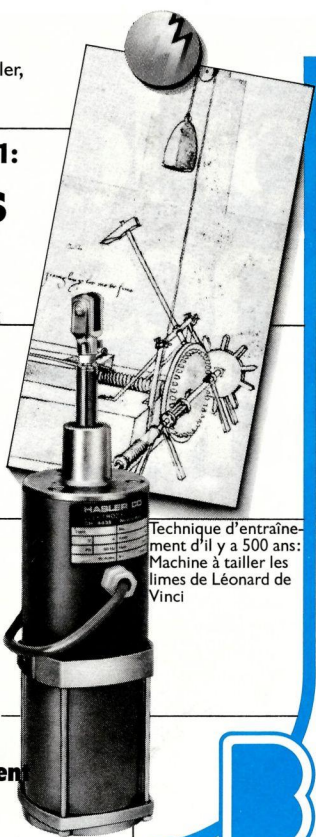
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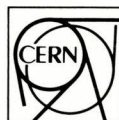


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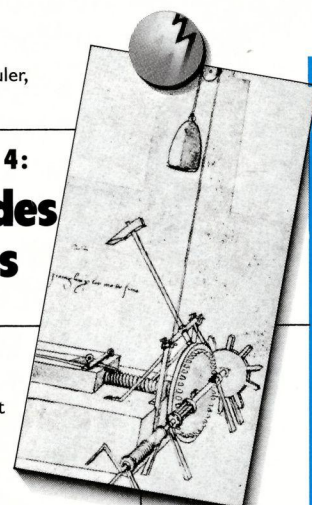
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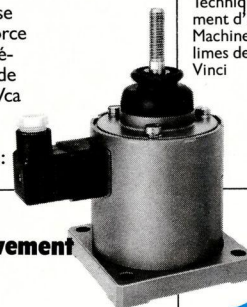
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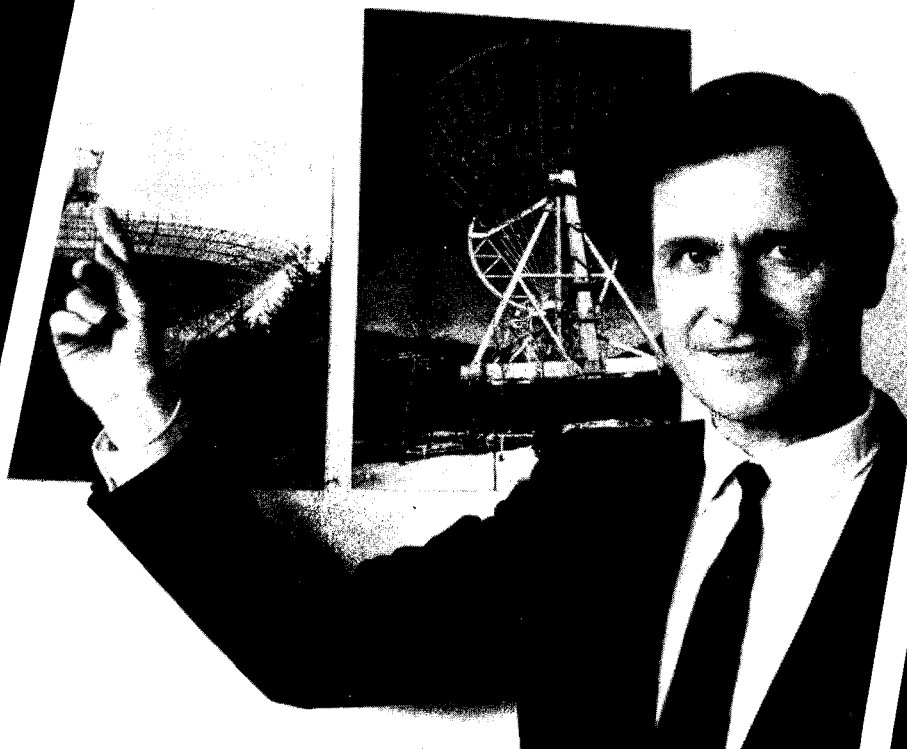


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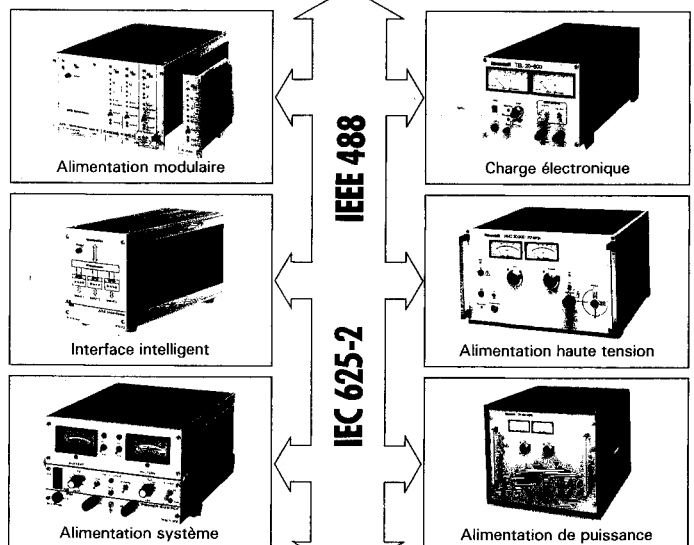
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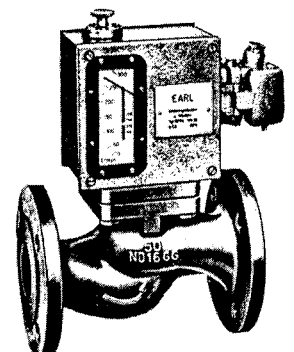
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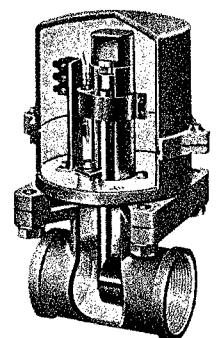
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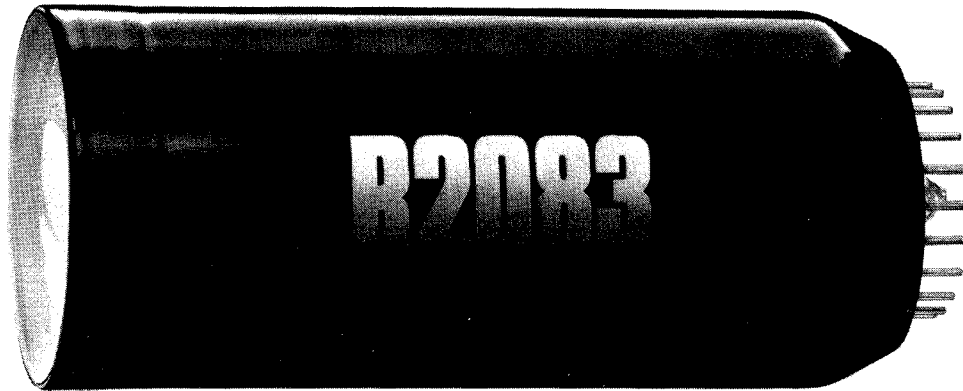
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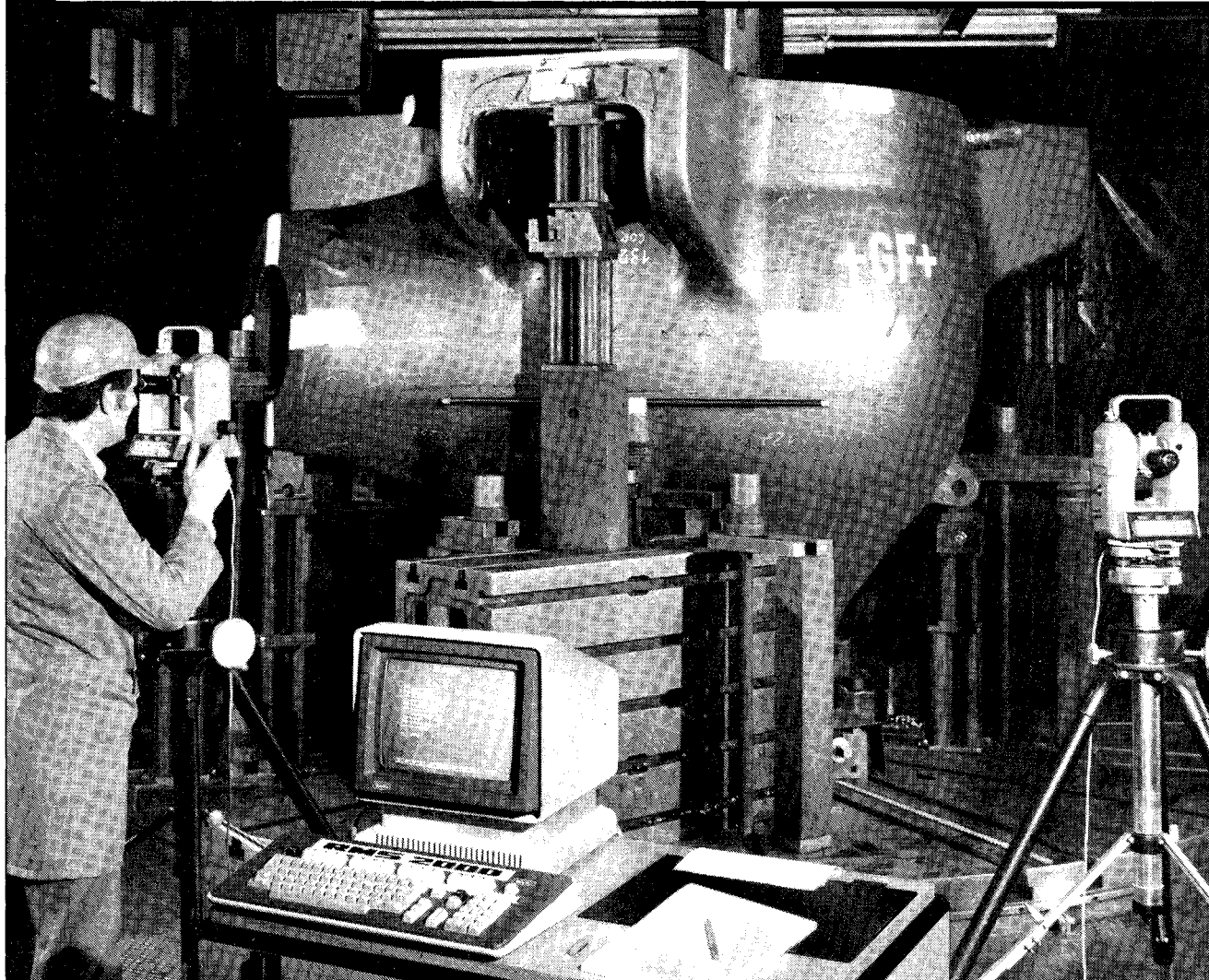
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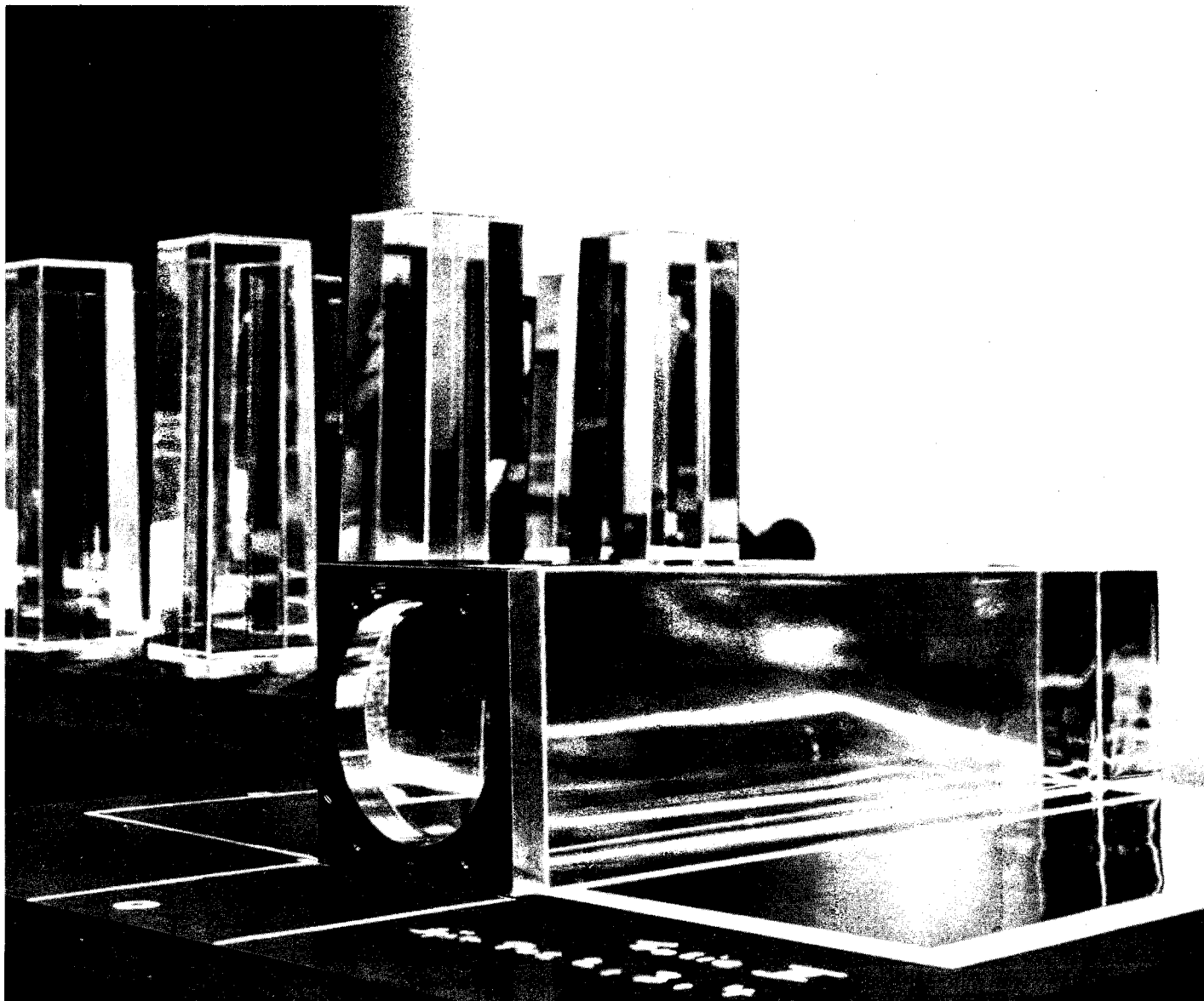
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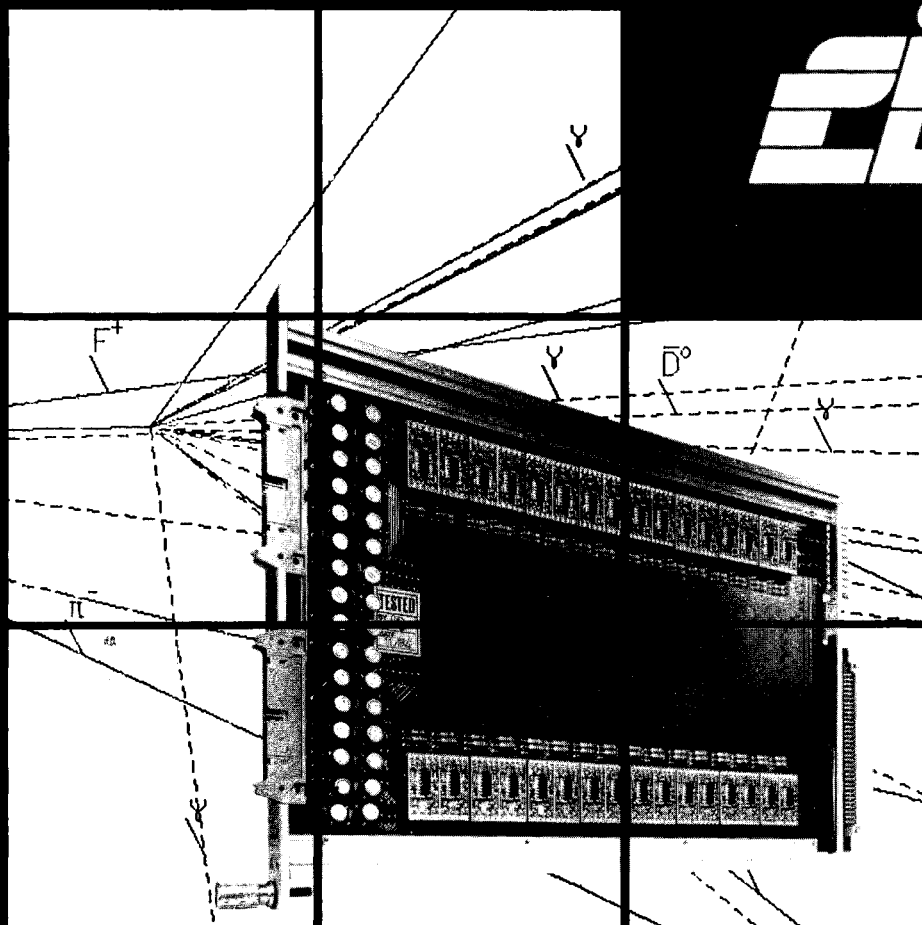
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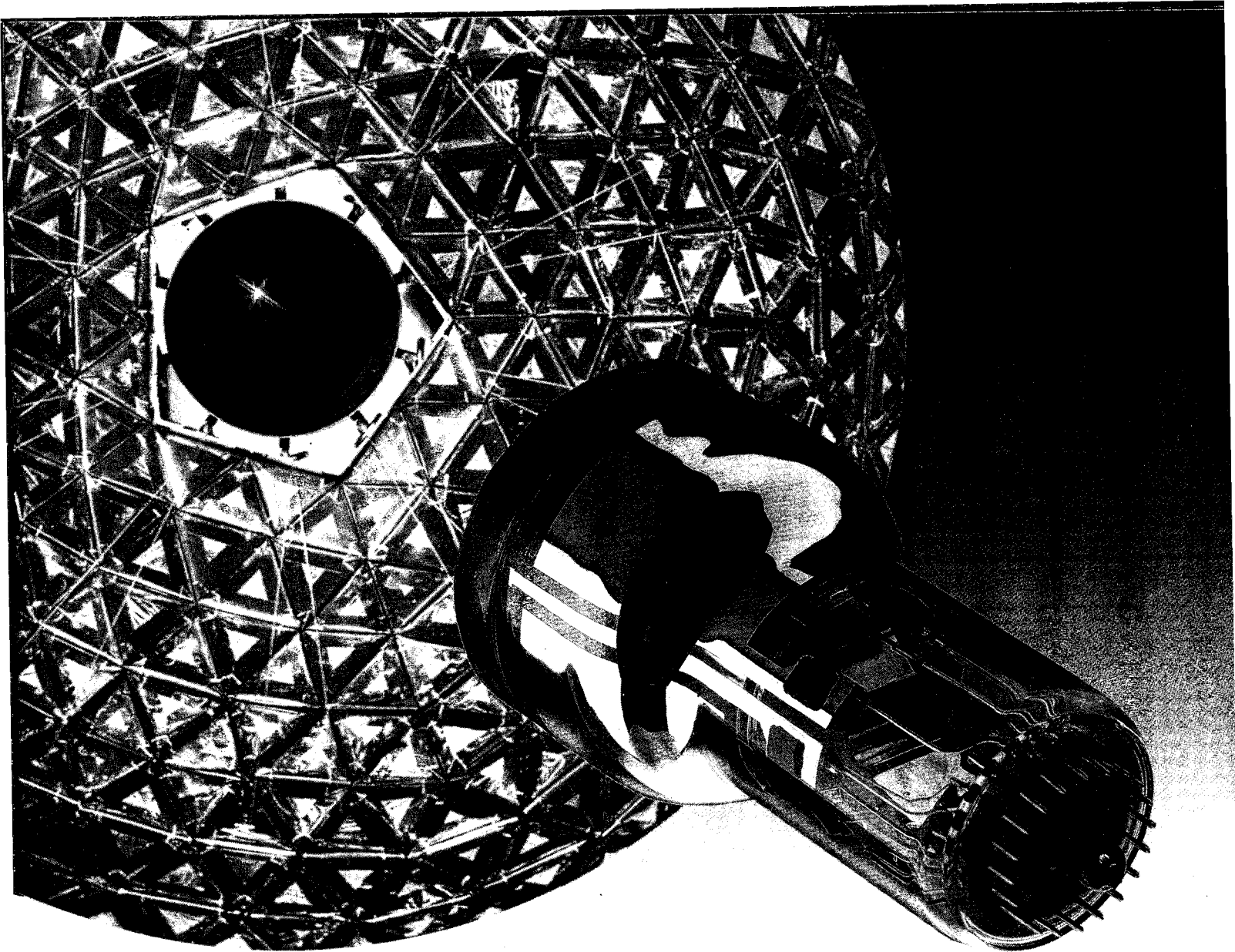
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Plastic ball photo courtesy of LBL/GSI

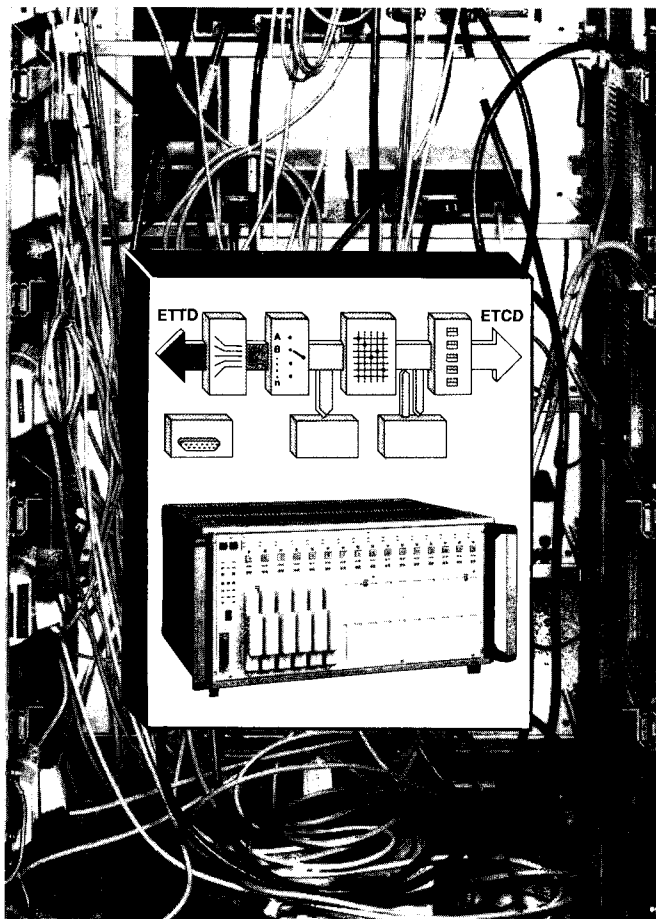
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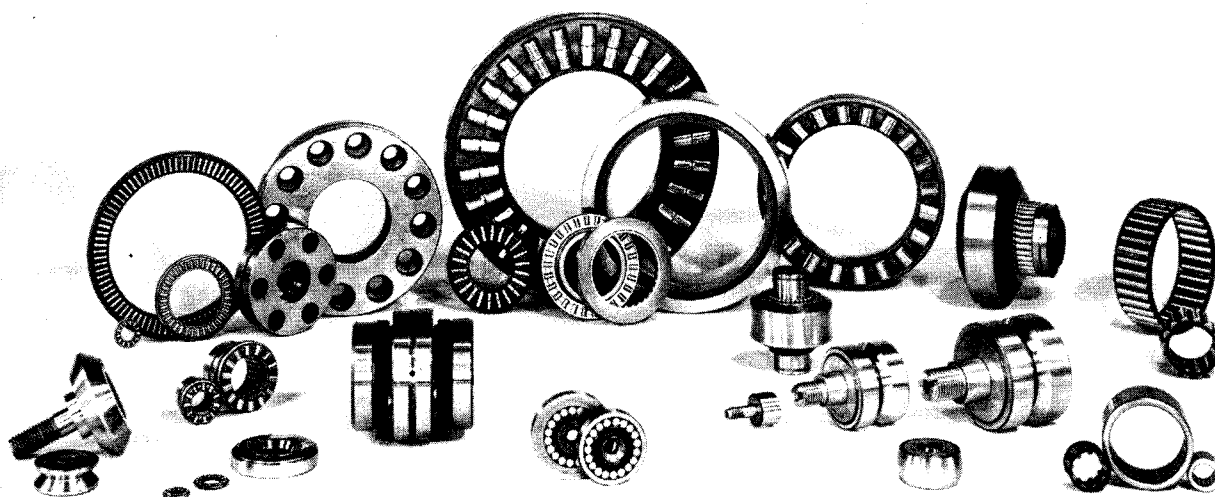
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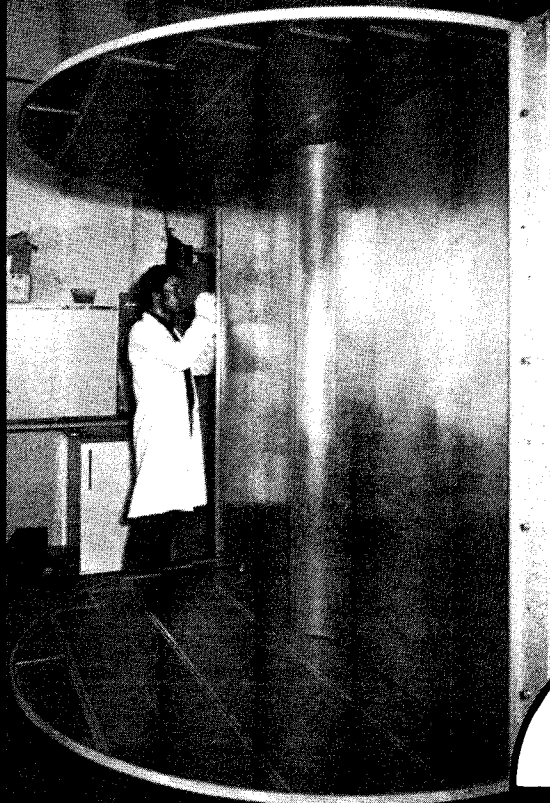
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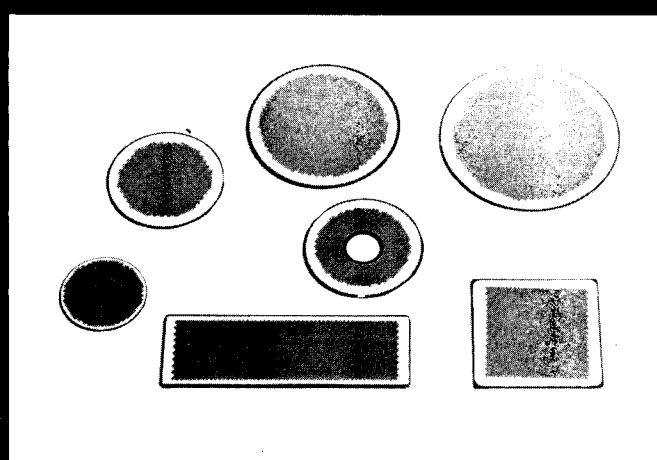
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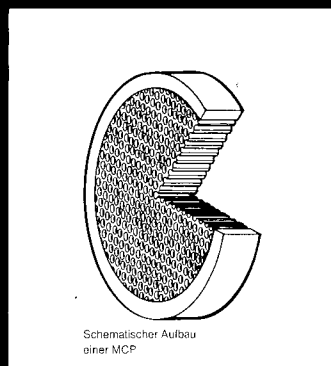
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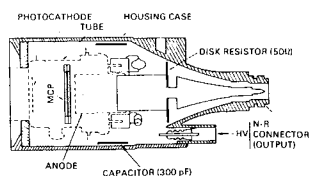


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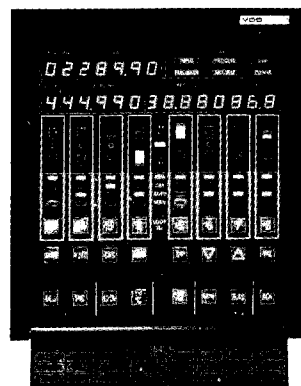
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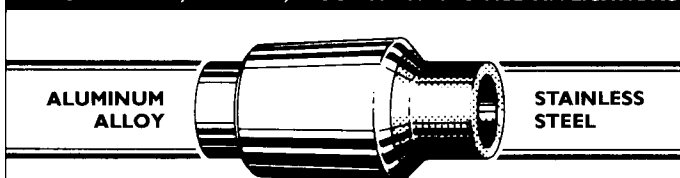


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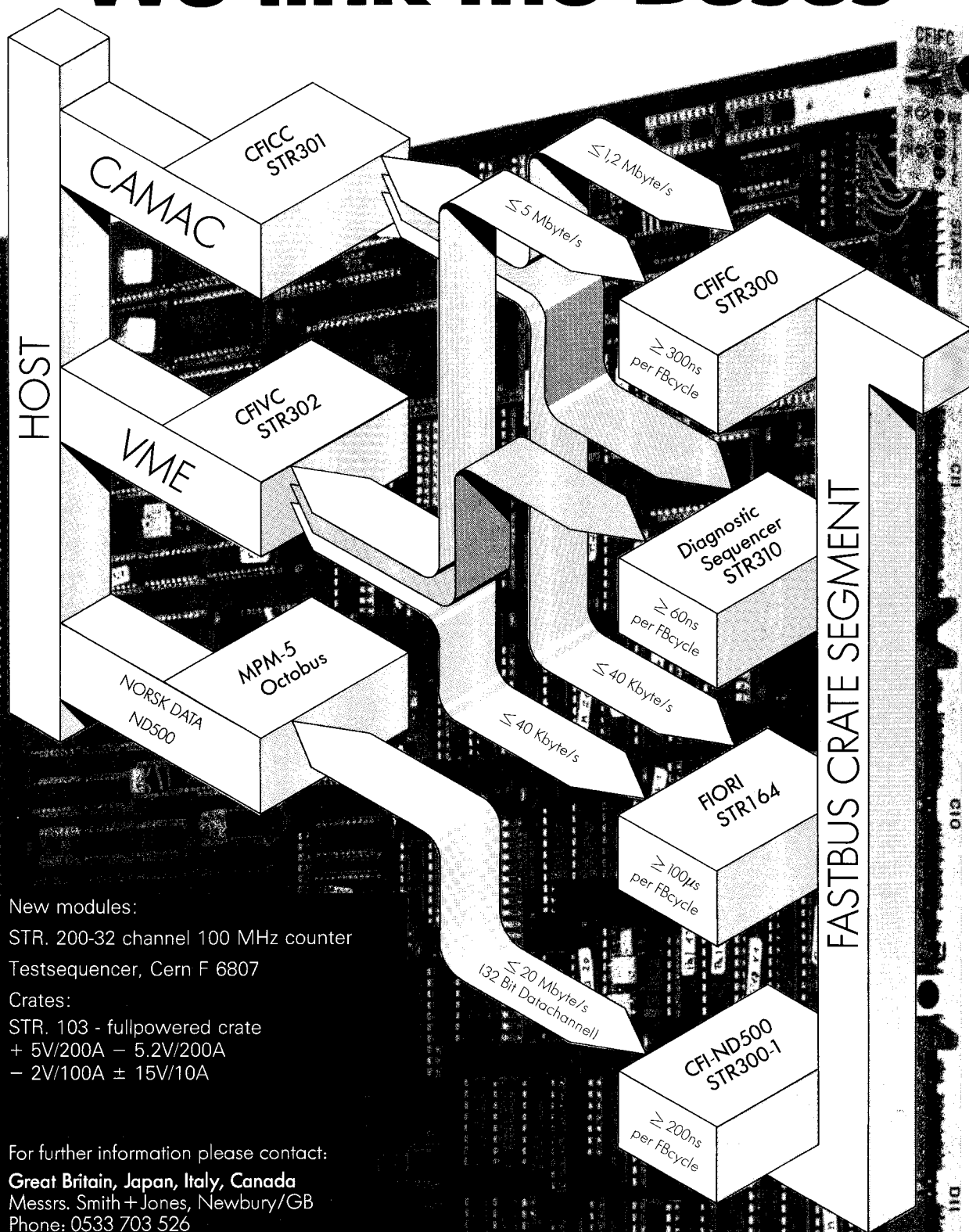
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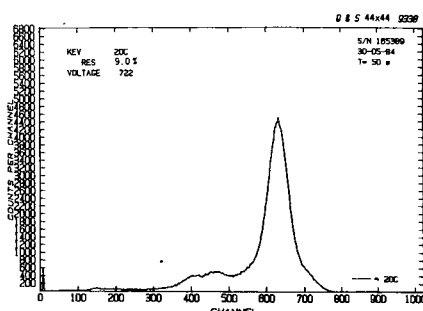
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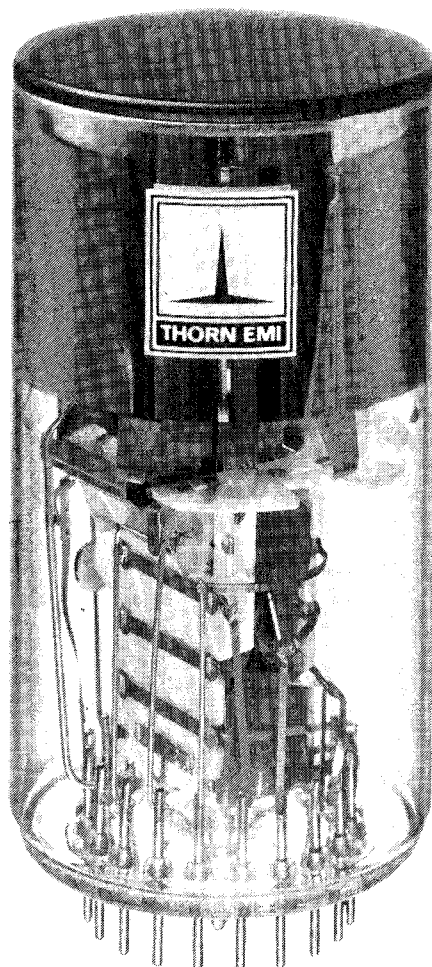
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