

# People and things

Left to right, Sergei Denisov, Yuri Prokoshkin and Mirian Mestvirishvili of Serpukhov, USSR, who received 1986 Lenin Awards for science and technology, together with Nguyen Van Heu of Vietnam.



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## On people

Georges Charpak of CERN has been elected foreign associate of the US National Academy of Sciences. These elections are in recognition of distinguished and continuing achievements in original research.

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## American Physical Society Awards

This year's American Physical Society (APS) awards were distributed at the Spring meeting in Washington in April. The Tom W. Bonner Prize in Nuclear Physics went to Lowell M. Bollinger of Argonne National Laboratory; the Davisson-Germer Prize to Daniel Kleppner of the Massachusetts Institute of Technology; the Dannie Heineman Prize to A. M. Polyakov of the Landau Institute for Theoretical Physics in Moscow; the J. J. Sakurai Prize to David Gross, of Princeton University, H. David Pol-

itzer, of the California Institute of Technology and Frank Wilczek, of the Institute for Theoretical Physics, Santa Barbara, California; and the Maria Goeppert-Mayer Award to Judith Young of the University of Massachusetts.

The 1986 APS meeting was a distinctly international affair, with participants from 50 Societies, and featured an International Conference on Research and Communications in Physics.

Presented at the American Physical Society's Forum on Physics and Society was the Leo Szilard Award for Physics in the Public Interest, which went for 1986 to Arthur H. Rosenfeld of Berkeley for his work in the application of physics to energy conservation. Rosenfeld originally worked at Berkeley with Luis Alvarez in particle physics, and created the famous 'Rosenfeld Tables'—the periodic Review of Particle Properties, now compiled by what has become known as the Particle Data Group. In 1974 he turned his interests to energy

conservation, and is now Director of the Center for Building Science at Berkeley.

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## Lenin Prizes

Recipients of the 1986 Lenin Prize awards for Soviet science and technology include Sergei Petrovich Denisov, and Yuri Dmitrievich Prokoshkin, Corresponding Member of the USSR Academy of Sciences, both of them Departmental Heads at the USSR's Institute of High Energy Physics, Serpukhov.

Prokoshkin is also spokesman of the joint CERN/USSR experiment studying pion-proton interactions. Awards go also to Mirian Alekseevich Mestvirishvili, Laboratory Head at Serpukhov, and to Nguyen Van Heu, President of Vietnam's National Centre for Scientific Research, and currently a member of the International Committee for Future Accelerators (ICFA). The awards are in recognition of their important work on production processes in strong interactions.

## THE INSTITUTE OF PARTICLE PHYSICS OF CANADA

The Institute of Particle Physics of Canada (IPP) invites applications for positions in experimental particle physics. Depending on experience and qualifications the applicant will be considered for appointment as Research Associate or Research Scientist. The Research Scientist appointment will be associated with an academic position at a Canadian university and includes the right to hold research grants and supervise graduate students. This appointment may lead to permanence after three years. The successful candidate will participate in the experimental particle physics program of the Institute which is listed below:

- (I)  $e^+e^-$  collisions in the T region (ARGUS Group at DESY);
- (II) photoproduction of charmed particles in a tagged photon beam (E691, FNAL);
- (III) hadronic production of p-wave charmonium states and direct photons (E705, FNAL);
- (IV) direct lepton production at the CERN SPS (NA34);
- (V) hadronic collisions with the UA-1 Detector at the CERN SPS Collider;
- (VI)  $e^+e^-$  collisions at LEP (OPAL Group at CERN);
- (VII) e-p collisions at HERA (ZEUS Group at DESY), including participation in the accelerator construction;
- (VIII)  $e^+e^-$  collisions at the SLC (SLD Group);
- (IX) Quark Structure of the Hyperons (E811, BNL).

Interested persons are invited to apply, including Curriculum Vitae and the names of three references to:

**D.G. Stairs, Chairman**  
The Institute of Particle Physics  
Rutherford Physics Building  
McGill University  
3600 University Street  
Montreal, Quebec H3A 2T8  
Canada

Applications should be received before August 31, 1986. In accordance with immigration regulations, preference will be given to citizens or permanent residents of Canada.

## UNIVERSITÉ DE GENÈVE

Le Département de physique théorique de la Faculté des sciences ouvre une inscription pour un poste de

### maître d'enseignement et de recherche

Fonction à plein temps exigeant un doctorat ou titre équivalent. Enseignement (minim. 2 heures) et recherche en théorie des champs et des particules. Tâches d'organisation.

Entrée en fonctions:

1<sup>er</sup> octobre 1987 ou à convenir.

Pour information et inscription, prière de s'adresser avant le 15 juillet 1986 au

**Prof. C. P. Enz,**  
directeur du Département  
de Physique théorique,  
24, quai E.-Ansermet,  
CH-1211 Genève 4



The Nuclear Physics section (K) of NIKHEF, the Netherlands' National Institute for Nuclear Physics and High-Energy Physics, has two openings for a position resident at Geneva (CERN) for an

### Experimental Postdoctoral Physicist (m/f)

to participate in the New Muon collaboration (NMC) which has an approved research programme on the EMC-effect and related QCD-aspects of nuclei at the 300 GeV muon beam at CERN. They will act as local contact person and supervisor of PhD students of the recently initiated Dutch participation in this programme. Experience in High-Energy and/or Nuclear Physics Instrumentation is required.

The appointment will be for two years with the Foundation for Fundamental Research on Matter (FOM). Information can be obtained from Dr. R. van Dantzig, tel. (20) 5920120 or 430315.

Candidates are invited to apply within a month after appearance of this advertisement, while enclosing a curriculum vitae and names of referees, to

**Prof. Dr. G. van Middelkoop,**  
Scientific Director  
of NIKHEF section K,  
P.O. Box 4395,  
1009 AJ Amsterdam,  
the Netherlands.

## THE PENNSYLVANIA STATE UNIVERSITY

### Experimental High Energy Physics

The Department of Physics is seeking candidates for a tenure-track position of Assistant or Associate Professor in Experimental High Energy Physics starting in the 1986-87 or 1987-88 academic year.

Candidates should have a Ph.D. in Physics, an established record of research accomplishments and expect to work initially in conjunction with other faculty and staff in the research effort at Penn State.

Research projects which are presently in their early stages include Fermilab experiment E-706, a study of direct photon production utilizing a spectrometer with liquid argon calorimetry located in the Meson Laboratory, and Fermilab experiment E-760, a study of charmonium states utilizing a hydrogen gas jet target inside the antiproton accumulator storage ring.

A desire and aptitude for teaching of undergraduate and graduate students is essential.

Send applications, including a curriculum vitae and names of at least four references, to

**Professor Gerald A. Smith**  
Head  
Department of Physics  
Box B.

The Pennsylvania State University,  
University Park, PA 16802,

by September 15, 1986, or until a suitable pool of applicants is identified.

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André Berthelot

André Berthelot, former director of Saclay's Department of Elementary Particle Physics, died on 30 March at the age of 74.

He was the initiator of fundamental physics research in the French Atomic Energy Commission and in 1947 set up its nuclear physics branch, becoming its head. In 1958 he established what was to become the Department of Elementary Particle Physics, of which he remained head until 1975. Under his leadership, Saclay became one of Europe's leading centres for particle physics.

Professor Berthelot was a scientific pioneer who left his mark on the development of French and European physics.

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#### Beam frontiers

Together the CERN Accelerator School and the US Particle Accelerator School organize a series of

courses on advanced topics. This year's course, *Frontiers of Particle Beams*, will be the second in this series and will be held on South Padre Island, Texas, from 23-29 October. It should be useful for graduate students, post-doctoral researchers and scientists interested in entering accelerator physics as well as experienced workers. Material from previous general accelerator schools would provide suitable preparation. The number of participants (including lecturers) is limited to 150.

Further information from US Particle Accelerator School, c/o Marilyn Paul, Fermilab MS 125, P.O. Box 500, Batavia, Illinois 60510, USA, or CERN Accelerator School, c/o Suzanne von Wartburg, CERN, 1211 Geneva 23, Switzerland.

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#### Proceedings

The Proceedings of the Joint US-CERN School on Particle Accelerators, held in Santa Margherita di Pula, Sardinia, in 1985 are available as *Lecture Notes in Physics*, No. 247, *Nonlinear Dynamics Aspects of Particle Accelerators*, published by Springer-Verlag, Berlin. The proceedings were edited by J. M. Jowett and S. Turner (CERN) and M. Month (Brookhaven).

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#### Fermilab and industry

The Fermilab Industrial Affiliates organization was established to improve university-industry research communications and to foster technology transfer from Fermilab. The Affiliates' meeting

this year concentrated on particle physics in the nineties, with talks on the design of the proposed US Superconducting Supercollider, discussion of future instrumentation and electronics needs, and a review of supercomputer developments.

There was also a report on the new proton accelerator for medical therapy project at Fermilab. This is developing a small proton accelerator for Loma Linda hospital in California that may serve as a prototype for a series of accelerators for hospital use. The State of Illinois has awarded the Laboratory a grant to promote commercialization of medical accelerator technology.

Fermilab Industrial Affiliates now includes forty institutions.

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#### Meeting on Symmetry in Nuclear Physics

The Joliot-Curie School of Nuclear Physics organized by the French Institut National de Physique Nucléaire et de Physique des Particules, together with the Institut de Recherche Fondamentale du Commissariat à l'Energie Atomique will be held from 15-19 September at Maubuisson, France. The school is aimed at all nuclear physicists, experimental and theoretical, with a special effort to cater for non-specialists. The theme this year is 'Symmetries in Nuclear Physics'. Further details from Mme. E. Perret, Ecole Joliot-Curie, IN2P3, 20 rue Berber du Mets, 75013, Paris, France. There are no registration fees.

## **Continuous Electron Beam Accelerator Facility (CEBAF)**

### **Associate Director for Research**

located in Newport News, Virginia, the CONTINUOUS ELECTRON BEAM ACCELERATOR FACILITY (CEBAF) is building a 4 GeV high-intensity, continuous wave electron accelerator utilizing superconducting RF technology. Its scientific goal is to study the structure and behaviour of the nuclear many-body system, its quark substructure, and the strong and electroweak interactions governing the properties of this fundamental form of matter.

We are presently searching for a nuclear physicist to direct the research program at CEBAF. As Associate Director of the Research Division, primary responsibility will be to oversee the design of the experimental facilities, including magnetic spectrometers, detectors and the experimental halls. The candidate shall also promote projects and programs, such as joint university programs, colloquia, symposia and meetings for the development of young scientists in the field of physical science.

To qualify, applicants must have a minimum of 15 years progressively responsible experience in nuclear physics, particularly in the design of complex and nuclear physics experimental facilities. Criteria also include a demonstrated ability to direct and coordinate teams of scientists in spectrometer and subsystem design.

To apply, submit a curriculum vitae, bibliography, and three professional references to:

**Personnel Director  
CEBAF  
12070 Jefferson Avenue  
NEWPORT NEWS / VA 23 606**

Qualified candidates will be referred to the Search Committee, chaired by John Schiffer (Argonne), and including Peter Barnes (Carnegie-Mellon), Gerry Garvey (Los Alamos), Stan Kowalski (M.I.T.), and Bob Siegel (William and Mary).

**CEBAF is proud to be an Equal Opportunity Employer.**

## **PHYSICS DEPARTMENT OF STANFORD UNIVERSITY**

announces an opening for the position of

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The Physics Department of Stanford University has an opening for a tenured faculty position in experimental atomic molecular laser and optical physics.

The applicants must have demonstrated ability to do significant independent work and must show promise of making a major impact on the field in the years to come. Excellence in the teaching of physics at both the undergraduate and graduate levels is an important requirement for the position.

Stanford University is an equal opportunity employer. We are specially interested in having applications from women and minority persons.

Interested persons are requested to send a resume containing curriculum vitae, a list of publications and names of at least three references to

**Professor Arthur SCHAWLOW  
Chairman, Atomic Molecular Laser  
and Optical Appointment Committee  
Physics Department  
STANFORD UNIVERSITY  
STANFORD/California 94 305**

***Those wishing to draw the committee's attention to potential candidates are invited to write to the same address.***

## **RESEARCH SCIENTISTS EXPERIMENTAL HIGH ENERGY PHYSICS**

### **Supercomputer Computations Research Institute Florida State University**

The Supercomputer Computations Research Institute of the Florida State University is seeking qualified candidates for 2 full time permanent research positions in experimental high energy physics. Preference will be given to scientists with strong software orientation willing to investigate the use of vector computers in the analysis of high energy physics data. Hardware experience is desired. Successful candidates will be involved in the ALEPH (LEP) or DO (Fermilab) collider experiments. Applicants should submit a curriculum vitae, list of publications and arrange for three letters of recommendation to be sent to

**Dr. Joseph Lannutti  
Director  
Supercomputer Computations  
Research Institute  
Florida State University  
Tallahassee, Florida 32306-4052  
U.S.A.**

*The Florida State University is an Equal Opportunity, Affirmative Action Employer.*

## **THE UNIVERSITY OF GENEVA**

has an opening for a position of

### **SENIOR RESEARCH ASSOCIATE (maître d'enseignement et de recherche)**

in the Department of Nuclear and Particle Physics.

This full time position requires a wide knowledge of subnuclear physics, data processing and experimental techniques. An established record of accomplishment in these fields of about 5 years or more after a Ph.D. in physics is expected.

The holder will participate in the L3 experiment at LEP. He will also have to perform some teaching duties.

The appointment may be effective as of January 1<sup>st</sup>, 1987 or at any other date upon mutual agreement.

Applications should be sent before September 30, 1986, to

**the Director  
of Département  
de physique nucléaire  
et corpusculaire,  
Prof. E. Heer,  
24, quai E.-Ansermet,  
CH-1211 Genève 4**

from whom further information may be obtained.

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## W for Watkins

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Recently published by Cambridge University Press in the UK is the 'Story of the W and Z', a first-hand account of the discovery at CERN in 1983 of the carriers of the weak force written by Peter Watkins, of the University of Birmingham and member of the UA1 collaboration at CERN. As well as explaining the

discoveries, Watkins' book provides an interesting insight into the daily life of modern physicists with its ups and downs.

Another book covering the W/Z saga is 'The Particle Connection' (published by Hutchinson in the UK and Simon and Schuster in the US), written by Christine Sutton, an ex-particle physicist who has subsequently carved out a name for herself as a writer on the subject.

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## ICFA actions

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Though the vision of a 'world' accelerator stays beyond the horizon, the International Committee for Future Accelerators does continue to provide a forum for inter-regional cooperation on front line research and technology in particle physics.

Recent activities included a Workshop on Superconducting Magnets and Cryogenics held at Brookhaven (we will carry a report on the meeting in a forthcoming issue). The ICFA Instrumentation Panel is planning a School on 'Concepts and Trends' in ICTP Trieste for June 1987. This Panel also publishes its 'Instrumentation Bulletin' to convey recent developments to the community.



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CERN Director General Herwig Schopper (left) welcomes Swiss President Alphons Egli to the Laboratory in May.

(Photo CERN 29.5.86)

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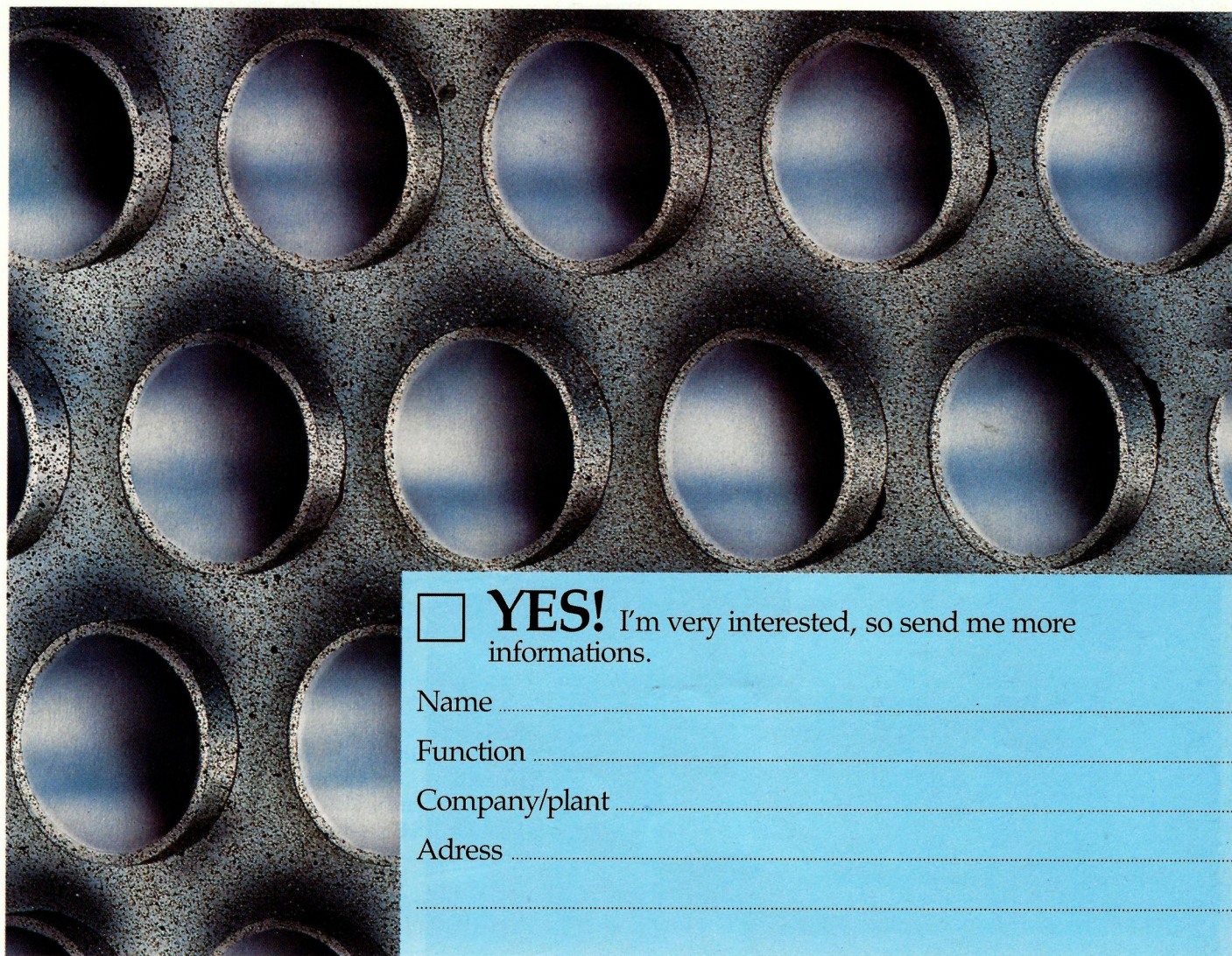
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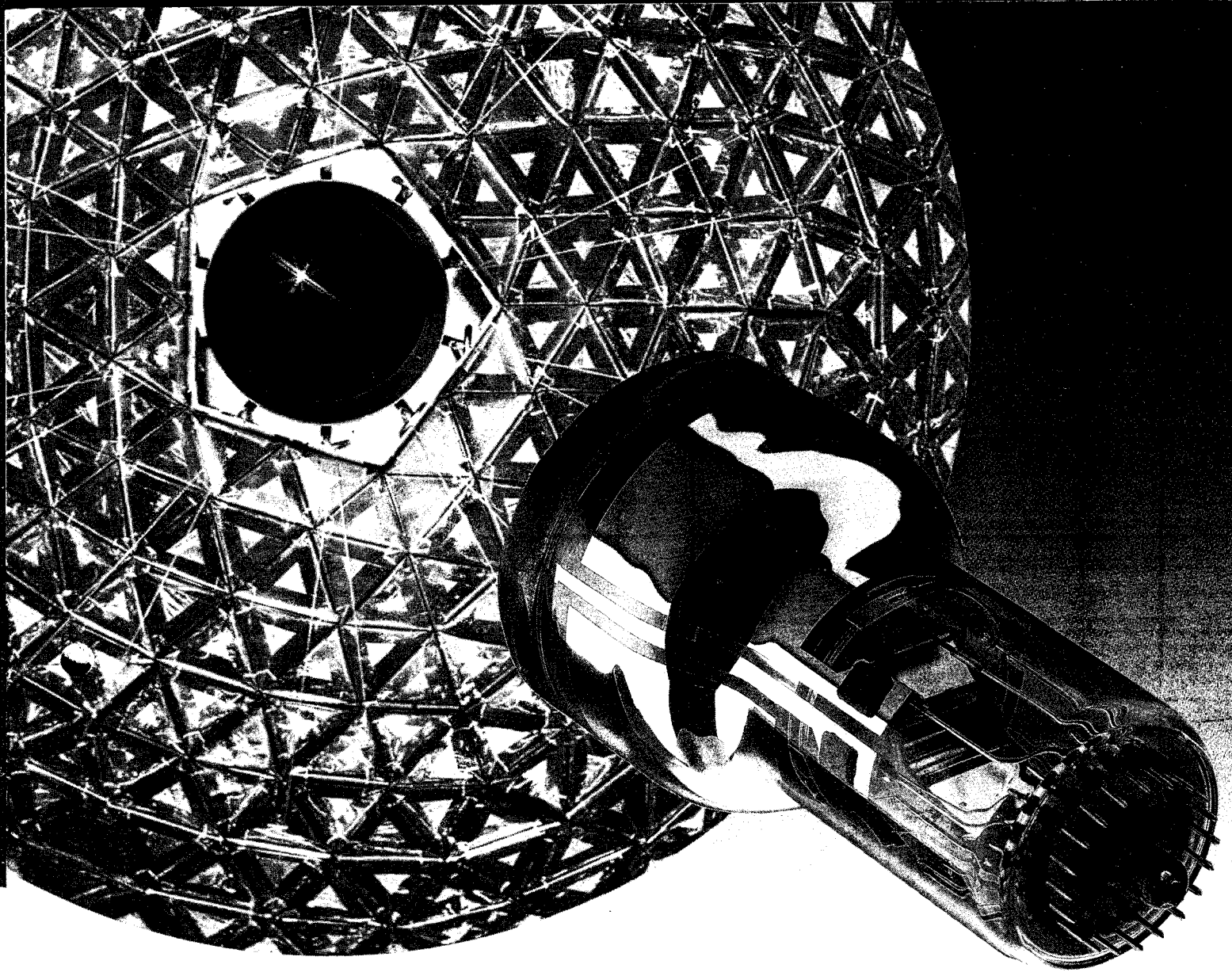
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*Plastic ball photo courtesy of LBL/GSI*

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## **CAMAC Fiber Optic Link**

Fusion and high power Laser Physics researchers often must link their data acquisition systems with high-speed, noise immune fiber optic links in order to avoid severe noise problems and differences in earth potentials. The LeCroy Model 5211 CAMAC Fiber Optic Link is a true UART (Universal Asynchronous Receiver Transmitter) that provides a 5 megabyte/sec fiber optic data and control path between CAMAC crates without data rate degradation through each station. Up to 62 crates may be linked in a single chain.

## **Announcing New Pulse Shape Recorder**

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## **Announcing New FASTBUS Product for VAX Compatibility**

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