

People and things

Associate Director for High Energy and Nuclear Physics of the US Department of Energy Peter Rosen (second from left) at CERN with (left to right) ATLAS muon project leader Chris Fabjan, CERN Non-Member-State affairs coordinator Jim Allaby, Sau-Lan Wu of the Aleph experiment, and ATLAS US coordinator Bill Willis.

(Photo CERN 3.8.97)

On people

DESY Director General Bjoern Wiik has received an honorary doctorate from the University of Oslo.

European Physical Society Prize

The prestigious 1997 High Energy and Particle Physics Prize of the European Physical Society has been awarded to theorists Robert Brout and Francois Englert of Brussels and Peter Higgs of Edinburgh for their milestone work in the formulation of the spontaneous symmetry breaking mechanism in quantum field theory which subsequently enabled electromagnetism and the weak nuclear force to be unified in a single 'electroweak' picture. The experimental observation of this symmetry breaking effect, now commonly known as the 'Higgs mechanism', is the major particle physics goal at the turn of the millennium. The prize was awarded on 24 August during the Europhysics Conference on High Energy Physics in Jerusalem.

ICTP Dirac medal

Peter Goddard of Cambridge and David Ian Olive of Swansea (UK), share the prestigious 1997 Dirac Medal awarded by International Centre for Theoretical Physics (ICTP), Trieste, for their pioneer research in string theory.

Goddard's work on the quantization of the relativistic string (with J. Goldstone, C. Rebbi, and C. Thorn) showed definitively that dual resonance models should be understood as string theories. Olive's



work on spacetime supersymmetry of the spinning string theory (with F. Gliozzi and J. Scherk) made possible the whole idea of superstrings, which we now understand as the most natural framework for supersymmetry and string theory.

The recent 'second superstring revolution' has also depended on pioneering insights on magnetic monopoles by Goddard, Olive, and J. Nuyts, and further extended by Olive and C. Montonen. Their revolutionary ideas for a dual interpretation of magnetic charge and electric-magnetic duality in non-abelian gauge theory have been of far-reaching importance.

Each year, ICTP announces the winners of the Dirac Medal on 8 August, the birthday of Paul A.M. Dirac who died in 1984 at the age of 82. The most recent winners have included Martinus Veltman, Tullio Regge, Michael Berry and Frank Wilczek.

Vladimir Naumovich Gribov (1930-97)

The eminent Russian theorist Vladimir Naumovich Gribov died in Budapest on August 13 following a stroke during a lecture tour in Spain.

Born in Leningrad, he graduated from Leningrad State University in 1952 and joined the Leningrad Physical Institute. He became famous for his pioneer work on the theory of complex angular momenta and the theorem on the shrinking of the diffraction cone in high energy elastic scattering. During his first visit to the West, at the 1962 conference at CERN, he made a strong impression. Later, first with I. Pomeranchuk and later with other co-workers, Gribov made landmark contributions to 'reggeization' in quantum field theory and multiple scattering. The asymptotic behaviour of high energy processes continued to be a major theme. At the begin-

Vladimir Naumovich Gribov (1930-97)



ning of the 1970s, Gribov and Lipatov set up their famous scattering evolution equations. He also made important contributions to non-abelian gauge theories (the Gribov 'horizon'). Latterly he turned to quantum chromodynamics.

Gribov led the Leningrad (Gatchina) school of theoretical physics for 25 years, and his pupils went on to become renowned in Russia, in Europe and in the US. His published lectures on Regge theory and quantum electrodynamics were basic texts for generations of Soviet theoretical physicists. From 1980 he worked in Moscow's Landau Institute. In 1991 he joined the Research Institute for Particle and Nuclear Physics in Budapest.

He was a member of the Academy of Sciences of the Soviet Union (later Russia), honorary member of the American Academy of Arts and Sciences and the Hungarian Academy of Sciences. Among his awards were the Landau prize of the USSR Academy of Sciences (the first

recipient), the Sakurai prize of the American Physical Society and the Alexander von Humboldt prize. During the cold war, his frequent absence from Western meetings testified to an independent spirit. An exceptionally warm and cheerful personality, Vladimir Gribov generously shared his ideas and erudition with his students and colleagues, and was universally revered as an indefatigable discussion leader. He is widely missed.

Herb Chen memorial

On 15 August, a memorial to Herb Chen was unveiled at the Sudbury Neutrino Observatory, the new underground laboratory soon to become operational. Herb Chen, born in China in 1942, died in 1987. After training as a theorist in the US, he switched to the challenge of neutrino observations. His keen awareness of the physics potential of a heavy water detector helped make SNO a reality.

Max Planck anniversary

This year marks the 50th anniversary of the death of quantum theory pioneer Max Planck in Göttingen, aged 89. From 1939-43 Planck spent his holidays in the Austrian Tyrol mountain resort of St. Jakob, which recently organized a small event in his memory. The photograph shows

Former CERN Council President Wolfgang Kummer at the recent 'Fundamental Physics in Space' summer school organized by the Austrian Space Agency in association with the European Space Agency and held in the Tyrol village of Alpbach, where Erwin Schrödinger is buried.

A still agile 82-year-old Max Planck on the summit of the Austrian Seespitze (3014 m). This year marks the 50th anniversary of Planck's death.



him, at the age of 82, on the 3014 metre-high Seespitze summit.

The courageous Planck resisted as best he could Nazi efforts to polarize German science, but in the final years of the war his spirit was broken by a series of personal disasters. However he lived to see the recreation of the illustrious German national scientific research organization, renamed in his honour.

As well as his own contributions to physics, Planck's name is also synonymous with fundamental



**Faculty and Postdoc Positions
Institute for Theoretical Physics
State University of New York
Stony Brook, N.Y. 11794-3840**

The Institute for Theoretical Physics at the State University of New York at Stony Brook will have openings for tenure track faculty members and Postdocs beginning September 1998.

The Institute does comprehensive research in various fields of theoretical physics including, but not limited to, gauge field theory, elementary particle theory, statistical mechanics, supersymmetry, superstrings. It is also looking forward to expansion into mathematical biophysics.

Review of applications will begin on November 15, 1997 and continue until the positions are filled.

Applicants should submit a curriculum vitae, a summary of current and proposed research and arrange to have three letters of recommendation sent to:

email address: jobs@max.physics.sunysb.edu

Professor Chen Ning Yang, Director or
Professor Peter van Nieuwenhuizen, Deputy Director,
SUNY, Institute for Theoretical Physics,
Box A,
Stony Brook, N.Y. 11794-3840.

The State University is an Equal Opportunity/Affirmative Action employer. Qualified women and minorities are encouraged to apply.

**UNIVERSITY OF TORONTO
TENURE TRACK FACULTY POSITION
DEPARTMENT OF PHYSICS**

The Department of Physics plans to make a tenure track appointment in High Energy Physics at the rank of Assistant Professor, subject to budgetary approval, with a starting date of July 1, 1998.

We seek candidates with a Ph.D. in Physics, proven or potential excellence in both research and teaching, whose research interests are in Theoretical Particle Physics. Salary will be commensurate with qualifications and experience.

Applications, including a curriculum vitae and three letters of reference should be sent to:

**Professor Pekka Sinervo
Chair
Department of Physics
University of Toronto
60 St. George Street
Toronto, Ontario ... M5S 1A7
Canada**

The deadline for the receipt of applications and letters of recommendation is December 31, 1997.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of Toronto is committed to employment equity and encourages applications from all qualified individuals including women, members of visible minorities, aboriginal persons, and persons with disabilities.

**Faculty Position
Experimental Relativistic
Heavy-ion Physics
Department of Physics
University of California, Davis**

The Department of Physics at the University of California at Davis invites applications for a tenure-track faculty position in experimental relativistic heavy-ion physics which will be available no later than July 1, 1999, contingent upon final administrative approval. We seek a candidate who will strengthen our existing program in relativistic heavy-ion physics which is currently centered on analysis of data from the E895(AGS) and NA49(SPS) experiments; and on design, software development, and fabrication of the FTPC subsystem of STAR(RHIC). We expect to hire the candidate who will provide leadership in the ongoing STAR effort and also in future efforts at the LHC. The successful candidate will have a doctoral degree and an excellent record of accomplishments in relativistic heavy-ion physics. Dedication to high quality undergraduate and graduate teaching and supervision of graduate students is essential. The appointment will be at the Assistant or Associate Professor level as determined by qualifications and experience.

This position is open until filled; but to assure full consideration, applications should be received by December 15, 1997. To initiate the application process, request an application package by writing an e-mail message to forms@physics.ucdavis.edu. Those who do not have access to e-mail should send curriculum vitae, publication list, research statement, and the names (including address, e-mail, fax, and phone number) of three or more references to:

**Professor Barry M. Klein, Chair
Department of Physics
University of California, Davis
One Shields Avenue
Davis, CA 95616-8677**

Further information about the department may be found on our website at:

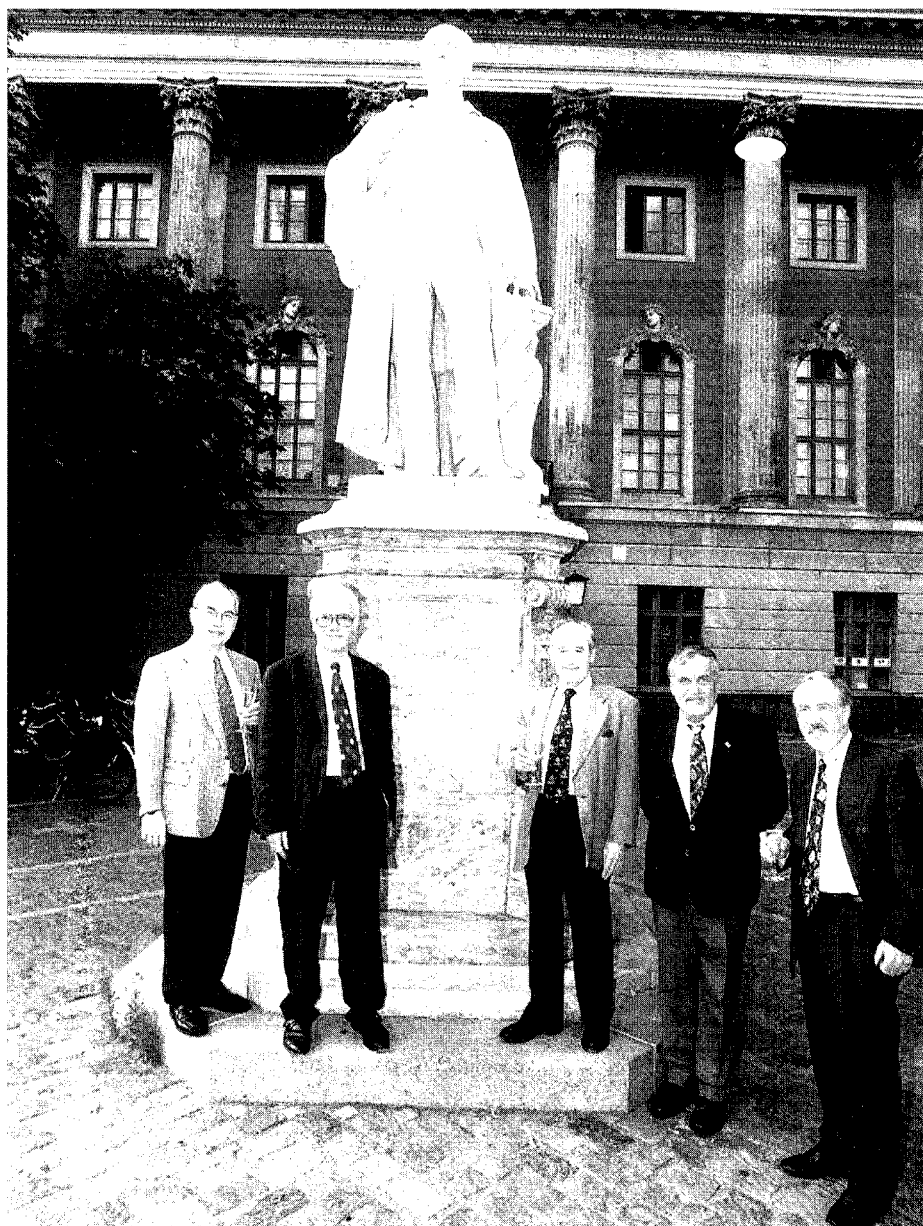
<http://www.physics.ucdavis.edu>

The University of California, Davis, is an affirmative action/equal opportunity employer with a strong institutional commitment to the achievement of diversity among its faculty and staff.

Spanning 30 years of CERN history. Victor Weisskopf, CERN's Director General from 1961-65, and current Director General Chris Llewellyn Smith. Weisskopf, who will be 90 next year, was at CERN recently for a meeting of the Pauli Committee (October 1996, page 14).



physics concepts, such as the Planck mass. Now the European Space Agency's Horizon 2000 programme prestige experiment to measure the cosmic microwave background radiation, formerly COBRAS/SAMBA, has been appropriately renamed Planck.

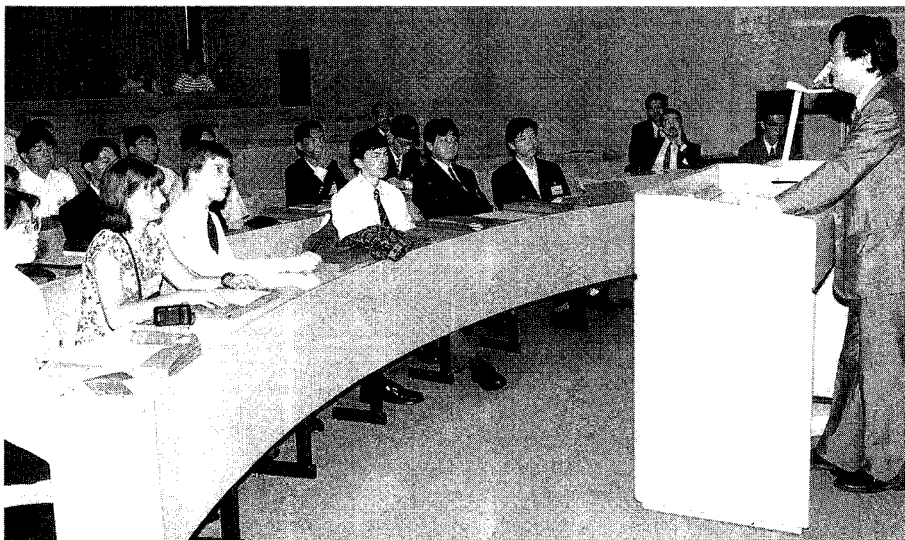


At the opening of the CERN exhibition on medical applications of physics at Berlin's Humboldt University, left to right, M.H. Foster of the Benjamin Franklin Clinic of the Free University of Berlin, K. Winter of Humboldt University and ex-CERN, exhibition organizer W. Kienzle of CERN, and H. Homeyer of Berlin's Hahn-Meitner Institute under Hermann von Helmholtz's stern gaze in Unter den Linden.

Belgian Royal Academy President André Delmer presents the Academy's prestigious Adolphe Wetrems Prize for mathematical and physical science to Belgian physicists Jean-Pierre Stroot (shaking hands) and Freddy Binon for their driving roles in the GAMS experiments. On the right is the Academy's Permanent Secretary, Baron Roberts-Jones. The long-lasting GAMS international collaboration has several claims to fame. For physics, it has made important contributions to particle spectroscopy and the search for glueballs, particles composed of gluons rather than quarks. GAMS was also one of the pioneer collaborations between CERN and the former Soviet Union and has done much to catalyse and cement these important ties.



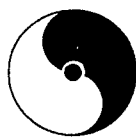
Hirofusa Sugawara, Director-General of the Japanese KEK Laboratory, opens a special international school for promising young students from 12 Asia-Pacific countries held this summer at KEK. The fourth session in a series sponsored by the Japanese Association of International Education with KEK as the host institute, its main theme was 'Exploring the World of Elementary Particles by Computer'.



Riverboat shuffle. New Orleans jazz on a trip down the Elbe during the recent Lepton-Photon symposium in Hamburg (see page 1), featuring DESY Accelerator Head Dieter Trines on banjo and Roy Rubinstein of Fermilab on trombone.

(Photo Albrecht Wagner)





RIKEN BNL Research Center

Brookhaven National
Laboratory

SCIENTIFIC STAFF POSITIONS

A research center focusing on the physics program of the Relativistic Heavy Ion Collider (RHIC), hard QCD/spin physics, lattice QCD and relativistic heavy ion physics has been established by the Institute of Physical and Chemical Research, Japan (RIKEN) at Brookhaven National Laboratory. The members of the center will be Research Associates (two year appointments), RIKEN BNL Fellows (up to five -year appointments) and Visiting Scientists. Frequent workshops are planned. Several positions for theorists in the above categories are expected to be offered for the fall of 1998. Members of the Center will work closely with the existing high energy and nuclear physics groups at BNL.

Scientists with appropriate backgrounds who are interested in applying for one of these positions should send a *curriculum vitae* and three letters of reference to Dr. T. D. Lee, Building 510A, Brookhaven National Laboratory, P.O. Box 5000, Upton, Long Island, NY 11973-5000, before Jan. 1, 1998. BNL is an equal opportunity employer committed to work force diversity.

BROOKHAVEN NATIONAL LABORATORY

on the frontier of science and technology

Post Doctoral Positions in Experimental Particle Physics

The **Fermi National Accelerator Laboratory (Fermilab)** has openings for post doctoral research associates in experimental particle physics. The Fermilab research program includes experiments with the 2 TeV proton - anti-proton collider and 800 GeV fixed target experiments. There are several opportunities for recent Ph.Ds to join the CDF and D-Zero collider efforts which have major detector upgrades in progress and are scheduled to begin data taking in November, 1999. New openings have recently been created in this area. There are also some limited opportunities to join fixed target experiments where analysis from the data taking in the run completed in September, 1997 is now in progress. Further fixed target running is being planned for 1999.

Successful candidates are offered their choice among interested Fermilab experiments which have openings at the time of the offer. Appointments are normally for three years with one year renewals possible thereafter. Every effort will be made to keep a Fermilab RA until he or she has the opportunity to reach physics results from his or her experiment.

Applications should include a curriculum vita, publication list and the names of three references. Applications and requests for information should be directed to **Dr. Jeffrey Appel, Head - Experimental Physics Projects**, [Appel@fnal.gov], Fermi National Accelerator Laboratory, M.S. 122, P.O. Box 500, Batavia, IL 60510-0500. EOE M/F/D/V.



Fermilab