CERN is to host the Magnet Technology Conference 2001

The 17th International Conference on Magnet Technology (MT-17) will take place in Geneva, Switzerland, on 24–28 September, and will be hosted by CERN. It will bring together approximately 500 scientists, engineers and experts from all over the world.

The conference will cover major projects and new developments in all aspects of the science, technology and use of magnets, as well as materials and supporting techniques. The programme will focus on topics including magnets for particle accelerators and detectors; fusion; and the generation of high fields, including superconducting, resistive, pulse and permanent magnets. There will be a strong emphasis on magnets for life science and industrial applications, such as magnetic resonance imaging and nuclear magnetic resonance, energy storage, levitation and separation. Sessions will be dedicated to new developments in high- and low-temperature superconductors and other magnet materials for reinforcement, impregnation and insulation.

An industrial and scientific exhibition, displaying products related to magnet technology as well as the achievements and services offered by industries, academia and research laboratories, will be held in conjunction with the conference.

The venue will be the International Conference Centre of Geneva, which is located in the international quarter of the city.

The opportunity to visit CERN and see the superconducting magnets of the Large Hadron Collider and other large experiments now under construction and test will make this conference a privileged meeting forum for all those with an interest in magnets and related technologies.

MT-17 promises to be very successful – about 600 contribution abstracts have been received and all space available for the industrial exhibition has already been booked.

Further information and registration are available at "http://www.cern.ch/MT-17/".

Every March, experimentalists and theorists meet at the Electroweak and QCD Rencontres de Moriond to discuss their latest results. These meetings provide good opportunities for interdisciplinary discussions. The Electroweak meeting takes place in parallel with the astrophysics conference, while the QCD (quantum chromodynamics) meeting runs in tandem with the biology conference. This year, results from the LEP electron–positron collider, together with an exciting visit to extra dimensions, were presented to biologists by **Egil Lillestol** of CERN and Bergen. Left to right: **Jean Tran Thanh Van**, director of Rencontres de Moriond; **Pierre Sonigo**, director of the Biology Rencontres; speaker Egil Lillestol; and **Bolek Pietrzyk**, member of the QCD Program Committee.

Dikansky celebrates his 60th birthday

From student to rector – distinguished Russian physicist Nikolai Dikansky celebrates his 60th birthday in July.

On 30 July, Nikolai Dikansky, distinguished Russian physicist, corresponding member of the Russian Academy of Sciences and rector of the Novosibirsk State University, celebrates his 60th birthday. He has contributed significantly to the development of the physics of particle colliders and storage rings. His achievements in the general theory of coherent oscillations, nonlinear dynamics, beam–beam instability and beam cooling are well known. In particular, he discovered that the abilities of a system to damp coherent and incoherent oscillations in a bunch are deeply related.

For more than 30 years, Dikansky has been one of the leaders in the study of the electron cooling of heavy particles, which has opened up a new field for particle colliders and storage rings. Results have shown that the physical phenomena responsible for electron cooling are much richer than had initially been expected. Other developments include the theory of coherent fluctuations in the cooled (intense) beams and the physics of supercold beams in storage rings. His great erudition, numerous scientific achievements and openness have always attracted young scientists. He has spent a lot of time teaching physics in Novosibirsk State University, where he has progressed from student to rector.

On 9 May CERN director-general Luciano Maiani was awarded the honorary degree of doctor of science by the Slovak Academy. Receiving the award in Bratislava, the director-general said that Slovak scientists were an active and valuable component of the international high-energy particle physics community. The Slovak Republic is one of the 20 member states of CERN.

Is it art? In the eyes of the judges for the title of Meilleur Ouvrier (best craftsman) de France, it certainly is. For this piece of work, **Didier Lombard** of CERN's manufacturing facilities group was crowned France's top metalworker in a ceremony at the Sorbonne in March. This triennial contest rewards skilled craftsmen in 200 trades, from pastry chefs and painters to lacemakers and goldsmiths. Covering the period from 1997 to 2000, Lombard's award comes hot on the heels of that of Michel Caccioppoli, another CERN metalworker who carried off the prize in 1997, making it two in a row for the laboratory.

MEETINGS

On 9–14 September 2001 the **International Autumn School on the Digital Library and E-publishing for Physics, Astronomy and Mathematics**, a course on digital libraries and e-publishing, will be held at CERN. It has been specially developed for librarians in the fields of physics, astronomy and mathematics. It is being organized by Tilburg University and Ticer B V – renowned for their International Summer School on the Digital Library – in co-operation with the CERN Scientific Information Service and the Los Alamos National Laboratory Research Library. The course director is Rick Luce, research library director at Los Alamos.

The course aims to provide knowledge support to academic libraries, research libraries and publishers in the current transitional phase, and to identify new roles and opportunities. Group discussions and workshops will be included.

Among those taking part will be Martin Blume (American Physical Society), David Dallman (CERN), Hans Geleijnse (European University Institute, Italy), Emanuella Giavarra (Chambers of Mark Watson-Gandy, UK), Gertraud Griepke (Springer-Verlag), André Heck (Strasbourg Astronomical Observatory), Carol Ann Hughes (Questia Media, US), Rick Johnson (The Scholarly Publishing & Academic Resources Coalition, US), Michael Jost (FIZ Karlsruhe), David Kohl (Cincinnati), Rick Luce (Los Alamos), Teun Nijssen and Thomas W Place (Tilburg, NL), Marten Stavenga (Elsevier Science, NL), Herbert Van de Sompel (Cornell) and Jens Vigen (CERN).

A detailed programme, biographies of the lecturers and administrative details are available at "http://cwis.kub.nl/~ticer/autumn01/".

A course brochure can be requested by filling out the form at "http://cwis.kub.nl/~ticer/autumn01/form.htm" or by contacting Mrs Jola Prinsen, Ticer B V, PO Box 4191, 5004 JD Tilburg, The Netherlands; tel. +31 13 4668310; fax +31 13 4668383; e-mail "ticer@kub.nl"; Web "http://www.ticer.nl".

The **International Workshop on Ageing Phenomena in Gaseous Detectors** will be held at DESY, Hamburg, on 2–5 October. Further information is available at "www.desy.de/agingworkshop".

Lattice 2001 – the XIX International Symposium on Lattice Field Theory will be held on 19–24 August at Berlin's Humboldt University. Conference topics include: QCD spectrum and quark masses; hadronic matrix elements; non-zero temperature and density; heavy quark physics; topology and confinement; chiral symmetry; spin and Higgs models, quantum gravity and random surfaces; and algorithms and machines. Further information is available at "www.desy.de/ lattice2001".

Electromagnetic Interactions with Nucleons and Nuclei, a EuroConference on Hadron Production with Electromagnetic Probes, will take place on 2–7 October in Santori, Greece. Part of this year's European

CERN physicist and world-renowned expert on gas jet target techniques, **Louis Dick**, recently celebrated his 80th birthday, and he is still active at CERN. He is seen (centre) in this 1964 photograph with **Charles Peyrou** (left), escorting **Francis Perrin** (right) around the laboratory.

Israel's Health Minister, **Nissim Dahan**, visited CERN on 16 May. At the ATLAS experiment's headquarters are (left to right): CERN coordinator for non-member state affairs **Jim Allaby**; ATLAS spokesman **Peter Jenni** (hidden); chief scientist for Israel's Ministry of Health **Bracha Regev**; Minister Dahan; director-general for Israel's Ministry of Health **Boaz Levy**; CERN director for technology transfer and scientific computing **Hans Hoffmann**; and senior ATLAS physicist **Giora Mikenberg**.

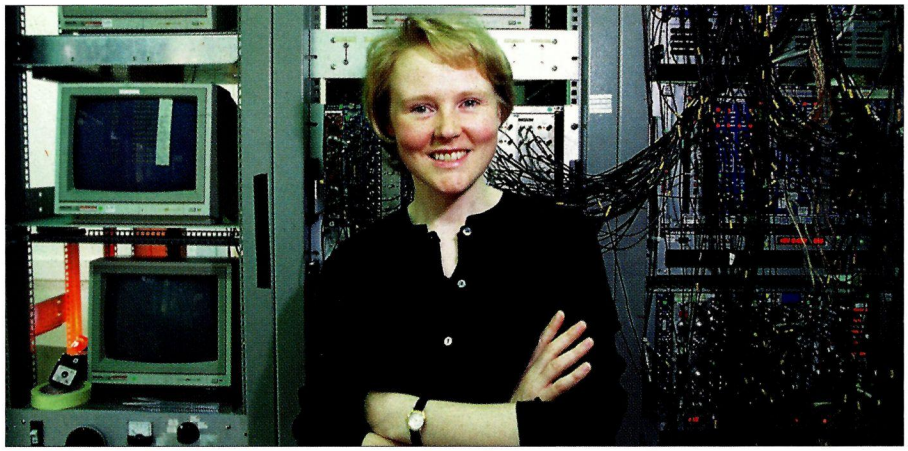
Science Foundation Euresco Conference Programme, it is supported by the European Commission's research director-general.

The ultimate goal of today's hadronic physics with electromagnetic probes (photons, electrons and muons) is to understand the strong interaction between quarks and gluons as described by underlying field theory – quantum chromodynamics – in the transition region where quarks and gluons become "confined" into the observed subnuclear particles. The conference is chaired by Klaus Rith (Erlangen).

Further information is available at "http://www.esf.org/euresco/01/pc01117a.htm".

HEP-MAD'01 is the first of a proposed series of biennial high-energy physics conferences in Madagascar. The main motivation is to promote high-energy physics and, more generally, theoretical physics in this remote part of the world, and to help the establishment of a future Theoretical Physics Institute.

The conference will be held this year on 27 September – 5 October in Antananarivo (the capital) and will alternate with the traditional QCD conference in Montpellier. However, the range of subjects discussed will be wider, touching on all aspects of high-energy physics (theoretical and experimental) and including astrophysics. The conference will include plenary and/or review talks by experts as well as short contributions and/or posters from young physicists. For more information visit "http: //www.lpm.univ-montp2.fr:7082/~qcd/".

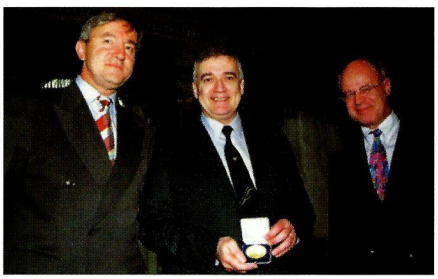


Former CERN physicist and editor of *CERN Courier*'s Physicswatch section **Alison Wright** has moved to *Nature*, where she has an internship working with the News And Views, News and Features teams, handling physical sciences.

Britain's **Princess Anne**, the Princess Royal, chats with art director **Andrew Giaquinto** (centre) during a visit to Institute of Physics Publishing, Bristol, where *CERN Courier* is published. Left is IOPP managing director **Jerry Cowhig**. (Bristol Evening Post.)

After 36 years of sterling service, **Helga Schmal** left CERN in May. As head of the director-general's office during the tenureship of Willibald Jentschke, Léon Van Hove, Herwig Schopper and, most recently, Luciano Maiani, and in her role as head of the CERN Council secretariat, Helga has played a key role in the organization for many years. Trying to find the words to describe her departure, CERN's legal counsel Jean-Marie Dufour said: "At CERN we are used to seeing things come and go, the arrival and closure of big machines, even the closing of LEP. But not the departure of Helga..." Here Helga is toasted by former CERN director-general **Herwig Schopper**.

Participants at the recent Workshop on Ion–Aerosol–Cloud Interactions at CERN. The workshop was sponsored by the European Geophysical Society, the European Physical Society and the European Science Foundation, and aimed to review current knowledge of ion–aerosol–cloud interactions and their possible role in solar-climate variability, along with related particle beam studies.



CERN's **Robert Cailliau** (centre) receives the Genève Reconnaissante medal from town mayor and physicist **Alain Vaissade** (left) at a ceremony held on 15 May. On the right is the secretary-general of Geneva's Administrative Council, **Jean Erhardt**.

Geneva has been honouring those who have contributed to the reputation of the city in this way since 1932. This year it selected Tim Berners-Lee and Robert Cailliau for their work on the World Wide Web. Berners-Lee, who was unable to be present, invented the Web at CERN just over a decade ago, and Cailliau was his first collaborator.

This was the first time that the Genève Reconnaissante medal had been presented for a technological development.

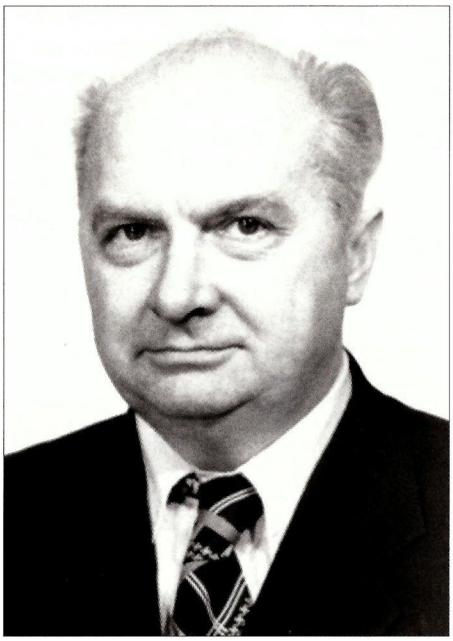
Alexander Baldin 1926–2001

The Directorate of the Joint Institute for Nuclear Research (JINR, Dubna, Russian Federation) deeply regrets to announce the death on 29 April, at the age of 75, of the outstanding scientist Alexander Mikhailovich Baldin.

Academician Baldin's many roles within the world of physics included that of scientific leader of the JINR Laboratory of High Energies, member of the Russian Academy of Sciences, professor and laureate of the USSR State and Lenin prizes in the field of science and technology.

He made pioneering and fundamental contributions to the development of the physics of particle electromagnetic interactions and relativistic nuclear physics, as well as to the creation of a new type of accelerator for charged particles and high-energy nuclei based on superconducting technology. His work is internationally recognized and is widely cited by the physics community.

Baldin greatly influenced the activity of the international research centre in Dubna and was an active initiator of scientific activities in JINR member states and in many leading research centres of the world. His demise is an irreplaceable loss for world science.



Alexander Baldin 1926–2001.

Fritz Schmeissner 1915–2001

Fritz Schmeissner died on 12 April, aged 86. He may be considered the father of cryogenic engineering at CERN.

Born on 4 January 1915 in northern Bavaria, he studied physics at Munich, and shortly before the Second World War became assistant to Walther Meissner, one of the pioneers of the phenomenological study of superconductivity. Meissner's authority and the importance of his research work largely protected Schmeissner from military obligations.

After the war he became the head of the newly created Low Temperature Research Centre at Garching/Herrsching near Munich. He was well on the way to a brilliant research career when, in the late 1950s, two physicists from CERN arrived, urging him to join the team that was engaged in the design of a liquid hydrogen bubble chamber for research with the Proton Synchrotron, which was nearing completion. With some hesitation, Schmeissner committed himself for three years, but his leave of absence from his German laboratory doubled, then tripled, and eventually ended with his retirement in 1980 at the age of 65.

Schmeissner's essential achievement, as it concerns CERN, was the integration of cryogenics into both the technical and the physics aspects of the organization's particle physics research programme. This meant on the one hand tempering the ambition of particle

Fritz Schmeissner 1915–2001.

physicists by introducing some respect for the thermodynamic and technical constraints of cryogenics, and, on the other, motivating industry to invest in the major research and development projects required by physics. Above all, it meant passing the modest wisdom of first-generation experts – the "old hands" – to young physicists, engineers and technicians who were fascinated by the possibilities and challenges of new, "big" science.

Milestones for Schmeissner were huge bubble chambers and superconducting magnets, gigantic liquid-deuterium beam targets, and a superconducting radiofrequency beam separator cooled by superfluid helium, in many respects technically a precursor of LEP2 and LHC technologies.

The number of cryoplants, cryolaboratories, cryogenic detectors and cryogenic research facilities built at CERN under Schmeissner's authority is impressive, particularly when we consider the state of the art when Schmeissner's career began. We should see the multi-cubic-metre liquid-helium installations of the LHC and its detectors against the backdrop of the days when the Meissner laboratory in Munich was proud of owning a few hundred cubic centimetres of liquid helium.

The initial spirit and outlook of CERN was determined by some strong personalities, and Fritz Schmeissner was certainly one of them. His sharp and critical mind was much appreciated and guaranteed the technical success of every project that he was involved with.

During his long career at CERN he made many friends – among research physicists and engineers, inside and outside CERN, and in industry. Some of them stayed in close contact with him during his years of serious illness and suffering, which were made bearable by his wife Anneliese and his children.

We have all lost a good friend.

Herwig Schopper.

René Morand 1940–2001

Our friend René Morand, a remarkable French physicist and a dynamic personality in particle physics, died on 20 April at the age of 61.

He began his career in 1968 with Pierre Lehmann at the Orsay linear accelerator laboratory, where he studied the photoproduction of π^0 and the elastic scattering of $\pi^{\pm}$, $K^{\pm}$ and p. From 1971 he worked with Michel Croissiaux at the Nuclear Research Centre, Strasbourg, and took part in the creation of a high-energy experimental physics group that collaborated in the search for new particles at CERN's ISR.

From 1973 to 1983, Morand concentrated on the physics of hyperons, first at the CERN PS and then at the SPS, before going on to the study of high-mass muon pairs from

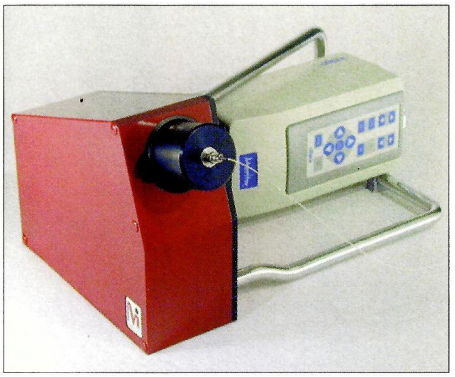
René Morand 1940–2001.

intense pion beams.

At the beginning of the 1980s, he switched to physics at electron–positron colliders, and in 1983 joined the Annecy-le-Vieux laboratory of particle physics, led by Michel Vivargent, where he made important contributions to the construction of an electromagnetic calorimeter for the L3 experiment. A tireless builder, his quest for a deeper understanding of the universe led him to the study of gravitational waves in 1993. He played a major role in the planning and development of the towers housing the optics for the interferometer of the Virgo experiment. From 1997 to 2000 he also served as technical director of LAPP. He left us before the commissioning of Virgo, where his experience and talents would have been of invaluable service. In losing René, his colleagues have also lost a friend.

Jean-Jacques Blaising, LAPP, Annecy.

Laser equipment: Raptelle optical spectrum analysers are optimized for DWDM control



Shoebox-sized- the Raptelle optical spectrum analyser from Multichannel Instruments of Stockholm.

Multichannel Instruments of Stockholm has announced a new line of products that have been optimized for the control of dense wavelength division multiplex (DWDM) components, especially tunable lasers. The heart of the product – the Raptelle – is a new type of optical spectrum analyser based on a patent pending optical design. So far, two models are available: the Raptelle 10000, which covers the 1000–1650 nm range, and the Raptelle 20000, which covers the 1500–1650 nm range at higher resolution.

Inside each Raptelle, division into segments is provided inherently by the optics in such a way that its more than 30 segments appear to be underneath one another on a two-dimensional InGaAs sensor. The camera, measuring 320 × 256 pixels, records all of the segments in parallel. Each segment represents a subspectrum of the spectral range. The software joins the segments together, resulting in more than 5000 simultaneously recorded channels covering the full spectral range. Consequently, there are no moving parts in the system.

The camera can operate at a frame rate of more that 100 per second. At a rate of 50 per second the system acquires, to a high level of precision, all of the data that is necessary for DWDM component calibration. This provides the manufacturer with the means to make an immediate increase in the rate of production of tunable lasers and other DWDM components, with assured quality control.

More information is available from Multichannel Instruments AB, Pilotgatan 2, S-12832 Skarpnäck (Stockholm), Sweden; tel. +46 8 605 70 90; fax +46 8 605 71 01; e-mail "info@multichannel.se"; Web "http://www.multichannel.se/".

Compact photomultipliers: a faster and more reliable photomultiplier designed for large experiments

Major particle physics experiments, as well as gamma-ray telescopes, need fast photomultipliers that can operate for years and withstand considerable doses of radiation. Electron Tubes offers a new range of compact 25 and 30 mm photomultipliers that have a long lifetime and stable gain characteristics designed specifically for this environment.

The new photomultipliers have a gain capability that ranges from 10^4 to 10^7, to cover a variety of applications from those involving high light levels down to photon counting.

All are available with quartz- or ultraviolet-transmitting glass windows that can withstand high dose rates.

More information is available from Electron Tubes Ltd, Bury Street, Ruislip, Middlesex HA4 7TA; tel. 44 (0)1895 630771; fax 44 (0)1895 635953; Web "http://www.electrontubes.com".

Correction

In the photograph of CERN's 1961 "g–2" experiment (April p4), the person seen on the far right is Théo Muller, not Francis Müller as the caption stated.

Apparently, when the picture was originally published 40 years ago the same error was made, which we regret.