

Faces & Places

AWARDS

Sessler honoured with Enrico Fermi Award

Andrew Sessler, well known both for his work in accelerator physics and as a humanitarian, has been awarded the US government's Enrico Fermi Award. He shares the award with Allen Bard, of the University of Texas at Austin, who was selected for his pioneering contributions to the field of electrochemistry. The two scientists received the award in a ceremony that took place in Washington, DC, on 3 February. Beforehand, they had the opportunity to meet the US president, Barack Obama, at the White House.

A former director of the Lawrence Berkeley National Laboratory (1973–1980), Sessler first made his scientific mark in the 1950s, with foundational work in particle accelerators that provided the basis for today's colliders, synchrotron light sources and free-electron lasers. The Fermi Award honours him for his "outstanding



contributions to the establishment of the beam-physics knowledge basis that has underpinned the development of current-generation particle accelerators and storage rings deployed at leading research institutions throughout the world".

Sessler is also recognized for his public advocacy of scientific freedom and other

Andrew Sessler, well known for his contributions to accelerator physics. (Image credit: Roy Kaltschmidt/LBNL.)

humanitarian causes. During the Cold War era, he was a co-founder of the human rights group Scientists for Sakharov, Orlov and Sharansky (SOS) – scientists who were persecuted as dissidents in what was then the Soviet Union.

The Fermi Award, which is one of the US federal government's oldest and most prestigious prizes for scientific achievement, is administered on behalf of the White House by the US Department of Energy.

● A revised and expanded edition of *Engines of Discovery: A Century of Particle Accelerators* by Andrew Sessler and Edmund Wilson is due out in April.

Maiani receives the 2013 Pontecorvo Award

Luciano Maiani has been awarded the 2013 Bruno Pontecorvo Prize by the Joint Institute for Nuclear Research (JINR). Maiani is honoured for his "outstanding contribution to particle physics, in particular his work on weak interaction physics and neutrino physics". A former



director-general of CERN (1999–2003), he was also the president of Italy's INFN and of the National Research Council. He is particularly well known for his work with Sheldon Glashow and John Iliopoulos

Luciano Maiani, right, receives the 2013 Pontecorvo Award from Richard Lednicky, vice-director of JINR. (Image credit: JINR.)

on a model that suppressed strangeness-changing weak neutral currents through the introduction of a fourth quark – charm.

The award was presented at the 115th session of the JINR Scientific Council by the vice-director of JINR, Richard Lednicky. During the ceremony Maiani gave a talk on perspectives in theoretical and experimental physics following the discovery of a Higgs boson, in which he highlighted investment in accelerators for the advancement of science.

François Englert receives honorary doctorate

On 12 November, four weeks before the Nobel prize award ceremony in Stockholm, François Englert was made Doctor Honoris Causa of the Blaise Pascal University (UBP) in Clermont-Ferrand, on a proposal of the Laboratoire de Physique Corpusculaire (LPC). Previous Nobel laureates in physics proposed by the LPC for honorary doctorates from UBP include Jack Steinberger in 1995 and Richard Taylor in 1997.

The LPC – a joint laboratory of CNRS-IN2P3/UBP – has worked with CERN since the early 1960s. Its contribution



to LHC experiments is particularly notable, with teams involved in the ATLAS, ALICE and LHCb experiments.

Clermont-Ferrand is the birthplace of

François Englert, right, with former student Jean Orloff, theoretician at Laboratoire de Physique Corpusculaire and mentor for this award. (Image credit: Danyel Massacrier.)

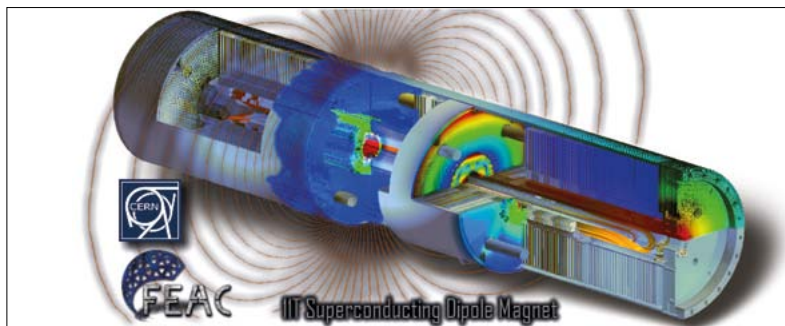
the writer, philosopher, mathematician and physicist, Blaise Pascal. He wrote this premonitory sentence about the vacuum in 1647: "Empty space is in between matter and nothingness" – or in 17th century French language: "*l'espace vide tient le milieu entre la matière et le néant*".

Faces & Places

Magnet design for HiLumi LHC wins competition

When Charilaos Kokkinos returned to Greece after a fellowship at CERN on the HiLumi LHC Design Study, he set up an engineering consultancy called FEAC Engineering. Now, the company has won a competition with his work on the design of an 11 T superconducting dipole magnet for the HiLumi LHC project. It was one of the winners of “best-in-class” in the corporate category of the 2014 ANSYS Inc. Hall of Fame Competition.

This annual image competition aims to highlight some of engineering’s most complex design challenges. The contest gives users of



The winning design image, for an 11 T LHC magnet. (Image credit: FEAC Engineering.)

ANSYS engineering design tools the chance to showcase their simulation and engineering skills through the production of eye-catching simulation images and animations.

Based in Greece, the new company, FEAC Engineering, provides consulting services

from product concept and computer-aided design drafting to advanced multi-physics finite-element analysis and design optimization by using state-of-the-art computer-aided engineering tools.

● For more details, see www.feacomp.com.

TOTEM and CDF studies win INFN thesis prize

Mirko Berretti from Siena University and Federico Sforza of INFN Pisa have won the 2013 INFN Conversi Prize for their PhD theses. They received their awards in a ceremony that was held on 7 February at the seat of the INFN Presidency in Rome.

Berretti earned his doctorate in studies at CERN’s LHC, specifically the “Measurement of the forward charged particle pseudorapidity density in pp collisions at $\sqrt{s}=7$ TeV with the TOTEM experiment”. In particular, he did important work on the pattern recognition and reconstruction of the charged-track

multiplicity in the T2 particle telescope. Sforza’s work was on measurement of the production of pairs of vector bosons with the CDF experiment at Fermilab. His thesis is on “Evidence for diboson production in the lepton plus heavy flavor jets final state at CDF”.

This annual award by INFN celebrates the role of Marcello Conversi (1917–1988). The competition is open to members of INFN who have gained doctorates in the past year with a thesis in the field of subnuclear physics.



Mirko Berretti receives his prize from INFN president, Fernando Ferroni, left, while Federico Sforza, right, looks on. (Image credit: INFN.)

Willibald Jentschke (centre left) toasts Donatus Degèle, Hermann Kumpfert and the synchrotron team in the DESY control room on 26 February 1964, after the first particles successfully circulated repeatedly through the vacuum system of the DESY synchrotron, approximately 300 m in circumference. After two weeks of at times frustrating efforts by the accelerator team, all went quickly. The first electrons reached 2.5 GeV in about 8000 orbits, with 5 GeV obtained the following day, just 1 GeV below the design energy. Today, 50 years later, the DESY accelerator continues to operate reliably, delivering beams of up to 1.8×10^{10} particles at 6.3 GeV, and is still in demand as a test beam for studies of future detectors. In this image, Norwegian accelerator pioneer Rolf Widerøe watches far left. (Image credit: DESY.)



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The Proton Synchrotron (PS) is the oldest accelerator operating at CERN. Its origins date back to 1952, when the provisional CERN Council decided to build a "high-energy" PS. Within a few months, the PS group convinced Council to launch a study for an alternating-gradient PS of "about 30 GeV" as the main project of the new laboratory (CERN Courier January/February 2004 p15). On 3 February 1959, the first of the 100 main magnet units was installed in the empty PS tunnel hauled by a small electric battery-driven vehicle.

Nobody in 1952 could have imagined that the PS would remain the backbone of CERN's scientific activities well into the 21st century. Keeping it in operation has involved some serious maintenance. Since 2003 there has been a huge campaign to refurbish the magnets, which has required removing and reinstalling them with the old vehicle – itself refurbished. Here, right, it is seen moving a refurbished magnet in a now crowded tunnel on 3 February 2009. (Image credits: CERN-IT-0106040 and CERN-AC-0902012 – 13).

APPOINTMENTS

Brookhaven names new deputy director for science and technology

Experimental physicist Robert Tribble has become deputy director for science and technology at the US Department of Energy's Brookhaven National Laboratory. He joins Brookhaven from Texas A&M University (TAMU), where he was distinguished professor of physics and astronomy and director of the Cyclotron Institute and the Nuclear Solutions Institute.

Tribble joined TAMU in 1975, following a PhD from Princeton University. An experimental physicist whose work spans a broad range of topics, he is widely credited with developing new tools and techniques that have advanced the field. He has served as a member or chair of numerous long-range planning committees for the American Physical Society and the Nuclear Science Advisory Committee (NSAC), leading the development of the most recent NSAC Long Range Plan for Nuclear Science, as well as evaluating the state of nuclear-physics facilities around the world. He played a key role in communicating the importance of the US nuclear-science programme – including research that takes place at Brookhaven's Relativistic Heavy-Ion Collider (RHIC).

In moving to Brookhaven, with its two



Robert Tribble is now deputy director for science and technology at Brookhaven. (Image credit: Brookhaven National Laboratory.)

major accelerator facilities – RHIC and the new National Synchrotron Light Source II – Tribble joins a team that is taking on new challenges, from expanding RHIC to the electron-ion collider eRHIC, to synthesizing new nanomaterials for materials and biosciences, improving energy efficiency and developing new sustainable energy sources.

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CENTENARY

Pisa celebrates Bruno Pontecorvo



Left: The room in the exhibition “Bruno Pontecorvo from Pisa to Moscow, a long journey through history and science” dedicated to his years in Russia. (Image credit: Federico Borghesi.) Right: Some of the symposium participants during a talk. At front left to right are Jack Steinberger, Giorgio Bellettini and Italo Mannelli, with Guido Altarelli and Josè Bernabeu visible behind. (Image credit: Giuseppe Fausto.)

The interplay between science, life and society was at the centre of a series of events organized in Pisa last year to celebrate one of its most renowned citizens, Bruno Pontecorvo, on the centenary of his birth.

On 18–20 September, distinguished scientists from around the world gathered to commemorate Bruno and his scientific ideas at an international scientific symposium organized by INFN, Pisa University, Scuola Normale Superiore, JINR Dubna and CERN. The first day was dedicated to his life story and to personal recollections by friends and former students, among them Jack Steinberger, Ettore Fiorini, Guenakh Mitselmakher and Samoil Bilenky. During the second and third days, scientific presentations by international experts gave a complete overview of the state-of-the-art in the different fields constituting the legacy of Bruno’s ideas: the theory of neutrino mass and mixing; solar, reactor, atmospheric and geo-neutrinos; double beta decay and direct measurements of neutrino mass; lepton-flavour violation processes and neutrinos in cosmology and astrophysics.

The centenary of Bruno’s birth was also the occasion to explore his life not only as a scientist but also as a man, in connection with history and society. This was the aim of the exhibition “Bruno Pontecorvo from Pisa to Moscow, a long journey through history and science”, held from 11 September to 22 December at the Limonaia di Palazzo Ruschi in Pisa. The exhibition portrayed Bruno’s life through the places and countries where he lived, starting with Pisa, where he was born on 22 August 1913 into a wealthy, non-observant Jewish family. Here, his grandfather, Pellegriano Pontecorvo, owned

a textile factory that employed about 2000 workers in the 1930s. One of the buildings of the Pontecorvo factory now hosts the physics department and the local INFN division. The reconstruction of his life as a student was enriched by original documents from his high-school and university years.

At the age of 18, Bruno left Pisa for Rome to complete his physics studies under the supervision of Enrico Fermi. Here, as the youngest physicist of the group, he participated in the experiments with slow neutrons for which Fermi was awarded the Nobel prize in 1938. Bruno then moved to Paris in 1936 to work with Frédéric Joliot-Curie, and later to the US and Canada to escape from racial persecution in Europe. His return to Europe (the UK) in 1949 and his subsequent move to the USSR in 1950, which raised heated discussions and debates at the time, were then presented. Bruno reappeared “officially” in Moscow in 1955, and from then on spent his life and scientific activity in Dubna, where he contributed to nuclear and elementary particle physics, especially in the field of neutrinos. The final section of the exhibition dealt with the years after 1978, when Bruno returned to Italy after 30 years of absence for the 70th birthday of his friend Edoardo Amaldi.

Each room of the exhibition displayed precious material illustrating Bruno’s work and life. In particular, the original equipment and sources (kindly lent by the physics museum of Rome “La Sapienza” University) used for the discovery of the artificial radioactivity induced by slow neutrons, together with hand-written logbooks with comments from Bruno, Fermi and co-workers, were a bonus for both physicists and the general public visiting the exhibition. Some of Bruno’s precious

personal belongings were also on show: the briefcase that he used to carry his papers and documents in Dubna, the Lenin Prize and the experimental logbooks where he wrote the results of the first experiments he performed in Dubna in the years 1950–1954. These notes witness Bruno’s remarkable insights into the existence of a muon neutrino and on the conservation of strangeness in strong interactions, well before their official claims.

A series of movies and images from the years 1930–1990 clarified the historical and scientific background in which some of the most brilliant ideas in particle physics were developed. A special room was dedicated to Bruno’s scientific legacy: instruments, interviews, movies and photos presented some of the present-day experiments motivated by his ideas – for example, neutrino oscillations, universality in weak interactions, lepton flavour and number violation and solar neutrinos.

In parallel with the exhibition, events were also organized to celebrate two of his brothers: projections of the most important films by the movie director Gillo Pontecorvo, and a conference about Guido Pontecorvo, the famous geneticist. A conference on “Pisa and the Pontecorvo family” underlined the importance of the whole family to the city of Pisa.

The centenary of Bruno’s birth was the occasion to explore, once again, the relationship between science and society, and to meditate on a famous saying of Bruno’s: “What’s more important in life: to make the right choices or to be a good person? I think I’ve made many mistakes, but I’ve always been a good person.”

● For more about the symposium, see www.pi.infn.it/pontecorvo100/. For more on the exhibition, visit www.pontecorvopisa.it/.

CELEBRATION

Beijing honours the memory of Sanqiang Qian and Zehui He

The Chinese physics community recently celebrated the centenaries of the birth of two of the country's pioneers in nuclear physics. The centenary of Sanqiang Qian (1913–1992) on 16 October 2013 was followed by that of his wife Zehui He (1914–2011) on 5 March this year.

A symposium to honour the scientific achievements of the two eminent physicists was held in Beijing on the centenary of Sanqiang Qian's birth. Organized by the Chinese Academy of Sciences (CAS), the China Association for Science and Technology (CAST) and the China National Nuclear Corporation (CNNC), about 350 friends, colleagues and students, as well as members of the Qian and He families, attended. There were key speeches by the president of CAS, the executive vice-president and chief executive-secretary of CAST, former students and colleagues of Sanqiang Qian and Zehui He, young students and the daughter and son of the two professors. The speakers recollected the lives and achievements of the two pioneering scientists from various perspectives, and their important contributions to Chinese nuclear research and Chinese science in general. Sanqiang Qian was vice-president of CAS and vice-president (and later honorary president) of CAST in the 1970s and 1980s. All of the speakers hoped that the scientific and technological achievements of Sanqiang Qian and Zehui He would inspire younger Chinese scientists in their current and future research.

Sanqiang Qian and Zehui He both graduated from the physics department of Tsinghua University in 1936. A year later, Sanqiang Qian went to Paris to the laboratory of Irène Curie (Marie Curie's daughter) and her husband Frédéric Joliot, obtaining his doctorate there in 1940 with a thesis supervised by the Joliot-Curies. Zehui He



went to Berlin after graduating, and after several years pursuing a doctorate and further research in Germany, she moved to Paris in 1946 and married Sanqiang Qian – with whom she had kept in contact via letter – and then started to work with him at the Curie Institute. Two years later, they returned to China where they both became deeply involved in the development of nuclear and particle physics in their home country (*CERN Courier* September 1992 p40, January/February 1994 p30 and December 2011 p29).

During the symposium, three newly

Sanqiang Qian, right, obtained his doctorate in 1940 in Paris, with a thesis supervised by Irène Curie, centre, and her husband Frédéric Joliot, left. In 1948, Sanqiang Qian and his wife Zehui He, also a physicist, returned to China, where they both became deeply involved in the development of nuclear and particle physics in their home country. Commemorative envelopes were issued as part of the centenary celebrations for Sanqiang Qian and Zehui He. (Image credits: Qian family and China Post.)

published books were distributed – a long biographical chronology of Sanqiang Qian and biographies of Sanqiang Qian and Zehui He – as well as two commemorative envelopes issued by China Post. In the afternoon, another ceremony with about 200 participants was organized by the CNNC at the China Institute of Atomic Energy, to open a retrospective exhibition commemorating the centenary of Sanqiang Qian's birth.

Hélène Langevin-Joliot and Pierre (and Anne) Joliot – the daughter and son (and his wife) of Frédéric and Irène Joliot-Curie, and the only two grandchildren of Pierre and Marie Curie – travelled to Beijing to participate in the afternoon ceremony. Hélène gave a speech recollecting Sanqiang Qian's study and research in France during 1937–1948 under the supervision of her parents, and his friendship with her family. On the morning of 17 October, Weichen Shen, the executive vice-president and chief executive-secretary of CAST, met with Hélène, Pierre and Anne at the headquarters of CAST. Weichen Shen thanked the French guests for coming to Beijing to participate in the centenary commemoration programme. On behalf of Chinese scientists and researchers, he acknowledged the valuable help that their parents had given to Chinese scientific research during its difficult beginnings in the early 1950s.

The French visitors were impressed by their meeting with Weichen Shen and other CAST officers, and considered it to be one of the best meetings during their visit to Beijing.

The following day, Hélène, Pierre and Anne went to Peking University (PKU) in the afternoon to give lectures in the School of Physics in celebration of its centenary, which by coincidence was on 19 October. Hélène and Pierre gave talks on “The Curies: from radioactivity to nuclear energy, beyond the Nobel Prizes” and “Basic and applied research, yesterday and today”.

On 3 March, a centennial commemoration symposium for Zehui He was held at the Institute of High Energy Physics (IHEP) of CAS, where she had served as deputy director from 1973 to 1984. About 100 colleagues, friends and members of her family attended. The Chinese *Journal of Modern Physics* also published a special 22-page section in its March issue, with articles celebrating her life.



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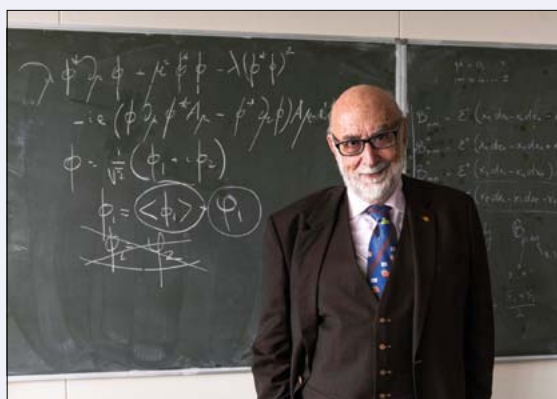
Hélène Langevin-Joliot and Pierre (and Anne) Joliot – the daughter and son (and his wife) of Frédéric and Irène Joliot-Curie, and the only two grandchildren of Pierre

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VISITS



Dutch state secretary for education, culture and science, **Sander Dekker**, right, visited CERN on 29 January. During his extensive tour of the laboratory, he was shown the LHC tunnel by **Gijs de Rijk**, of CERN's Technology Department. (Image credit: CERN-PHOTO-201401-019 – 11.)



Nobel laureate **François Englert**, pictured here in front of the equation describing the Brout-Englert-Higgs (BEH) mechanism, came to CERN on 21 March to present "The BEH mechanism and its scalar bosons" – his first public talk since receiving the 2013 Nobel Prize in Physics together with Peter Higgs. (Image credit: CERN-PHOTO-201402-033 – 2.)

INDUSTRY

German companies display their wares at CERN

The 12th Germany at CERN, held on 28–29 January, saw the largest gathering of German industrial representatives at CERN to date. A heated marquee outside the CERN restaurant accommodated 59 companies, which presented their latest ideas and technologies for the maintenance, renovation and expansion of CERN's accelerator complex to interested scientists and buyers.

The exhibitors were from a broad range of technical fields, with the majority engaging in those of electronics and vacuum technologies. The event was organized by CERN in collaboration with the German Federal Ministry of Education and Research (BMBF). Karl-Eugen Huthmacher, head of the BMBF's directorate-general 7: Provision for the Future – Basic and Sustainability Research, visited the stands after inaugurating the exhibition together with CERN's director-general Rolf Heuer.



BMBF's Karl-Eugen Huthmacher, right, is welcomed to the 12th Germany at CERN exhibition. (Image credit: CERN-PHOTO-201401-017 – 32.)

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OBITUARIES

Sergey Kruglov 1929–2014

Sergey Pavlovich Kruglov, professor and chief researcher at the Petersburg Nuclear Physics Institute (PNPI), Gatchina, passed away on 20 January following a brief hospitalization. Sergey was an honoured scientist of the Russian Federation and a leading figure in meson physics and electromagnetic interactions, with the study of muon spin rotation (μ SR) one of his most notable contributions.

Sergey was born in Vologda on 5 April 1929. Admitted to the St Petersburg State Polytechnic University (the former Leningrad Polytechnic Institute), he received his MA degree in nuclear physics in 1953. He then went to PNPI (the former Leningrad Nuclear Physics Institute and Ioffe Physical-Technical Institute) and in 1961 received his PhD on the comparison of ionization and calorimetric measurements of the energy flux of gamma radiation from electron accelerators, with Anton Komar as his adviser. Sergey summarized this study in the book *Measurement of the total energy of the beams from the electron bremsstrahlung accelerators* (1972 Nauka) with Komar and



Sergey Kruglov. (Image credit: Nance Briscoe.)

Igor Lopatin. He had a major impact on the development of both the PNPI High Energy Physics Division and the field of hadron physics at Gatchina and worldwide.

Sergey later focused on the complete experiment for pion–nucleon elastic scattering to determine partial-wave amplitudes and parameters of low-lying non-strange nucleon resonances. He led the effort to build two meson channels at the 1-GeV PNPI proton synchrotron, and supervised the construction of the two

main detectors and the unpolarized and polarized hydrogen targets used to measure cross-sections and polarization observables. The partial-wave analysis technique allowed him to interpret data from Gatchina and around the world. In 1985, Sergey received his habilitation qualification on the study of elastic pion–nucleon scattering in the region of low-lying pion–nucleon resonances. Later, he was involved in the Crystal Ball activity at Brookhaven National Laboratory to study hadronic physics using both pion and kaon secondary beams. Finally, he returned to his favourite task – the physics of electromagnetic processes – using the Crystal Ball at the Mainz Microtron.

Sergey supervised more than 20 PhD students who now work at nuclear-physics facilities worldwide. He was a great mentor and friend, and an excellent teacher with infectious enthusiasm and a strong supporter of his students. The community will miss him greatly.

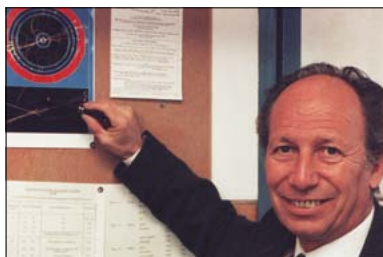
● William Briscoe, Anatoly Gridnev, Nikolai Kozlenko, Igor Lopatin, Igor Strakovsky and Victorin Sumachev.

Lorenzo Foà 1937–2014

Lorenzo Foà, a protagonist of experimental high-energy physics for five decades and mentor of dozens of students, passed away quietly and unexpectedly in Pisa on 13 January. He was professor at the Scuola Normale Superiore in Pisa and spent most of his scientific career at CERN.

Lorenzo was among the proponents of two experiments in the early 1960s that allowed the first measurement of the π^0 and η lifetimes via the Primakoff effect at Frascati and then at DESY. Later he joined first the CERN-Orsay-Pisa collaboration studying polarization in hadron scattering and then the Pisa-Stony Brook collaboration at CERN's Intersecting Storage Rings (ISR). This experiment discovered that the total proton–proton cross-section starts increasing at ISR energies – a departure from what had previously appeared to be flat “asymptotic” behaviour.

In the 1970s, Lorenzo was the founder and spokesperson of the FRAMM (for frammentazione, or fragmentation) collaboration, which established the basis



Lorenzo Foà, a founding father of ALEPH. (Image credit: Courtesy Foà family.)

of the NA1 and NA7 experiments. In NA1, a multiparticle spectrometer was used in conjunction with the first active targets to measure the lifetimes of charmed mesons. In NA7, the same spectrometer in a different configuration allowed precise measurements of the electromagnetic form factors of pions and kaons in the space-like region and of the pion in the time-like region. FRAMM was a key stepping stone for the development of new detectors and their successive

introduction in modern physics.

Lorenzo went on to become one of the founding fathers of the ALEPH experiment in the 1980s. He organized Italian participation in the collaboration and co-ordinated many projects, both in the construction phase and during the physics exploitation. He was spokesperson of the collaboration in the years 1993 and 1994.

As scientific director of CERN, Lorenzo was instrumental in approval of the LHC in December 1994, following the cancellation of the Superconducting Super Collider project in the US in 1993. After approval, he played a leading role in getting the international community (Japan and US) on board to complete funding of the construction of the accelerator in a single stage.

In 1998, Lorenzo joined the CMS collaboration and was chair of the board from 2000 until 2009, during the delicate period of the end of the construction and commissioning of the experiment. His actions were vital in strengthening the collaboration and improving the structures and procedures,

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with particular attention given to promoting young physicists.

The whole high-energy physics community owes a great deal to Lorenzo's vision, wisdom and charisma. He was a

great scientist and a protagonist in science management at the European and worldwide level. He was also a special person: very generous and always around, he was able to tell his friends and students about what is

important in science and life.

- *His colleagues and friends.*
- A conference in memory of Lorenzo Foà will be held in Pisa on 12 June. See <http://particlephysics.sns.it/index.php>.

François Etienne 1944–2014

It is with great sorrow that colleagues at the Centre de Physique des Particules de Marseille (CPPM), at CNRS-IN2P3 and at the CNRS IT Division learnt of the passing away of François Etienne in January.

François had a distinguished and fruitful career, focused on triggering, data extraction and computing. He started working in the 1970s in Strasbourg, in connection with CERN, Fermilab and the Massachusetts Institute of Technology, on a system to analyse pictures from bubble chambers. He defended his "thèse d'Etat" on the production of charmed particles in 1984 at the University Louis Pasteur. Later, at the Large Electron–Positron collider at CERN, he made substantial contributions to reconstruction, data analysis and visualization software for DELPHI, and then for ALEPH when he joined CPPM in 1986.

At CPPM, François was in charge of setting up a computing group that grew successfully into a computing department, which remained under his responsibility until 1998. Initiator and organizer of the 1st IN2P3 Computing School in 1990, and organizer of many of the following ones, he was also a member of the CERN Computing School International Advisory Committee, and organizer of international conferences.

François was very active on the ATLAS experiment at the LHC from its inception, and created a group at CPPM to work on event triggering and filtering. He played a leading role in the ATLAS trigger data-acquisition (TDAQ) community, notably as a member of its



François Etienne in 1994. (Image credit: François Touchard.)

steering committee, as chairman of the TDAQ Institute Board – where his poised management and professionalism were highly appreciated – and as co-ordinator of the ATLAS Event Filter. He was also chair of the RD47 research project at CERN and a member of RD13.

His unique, innovative and thoughtful vision of the ever-growing and critical role of computing in particle physics and in other fields led him to play a prominent role in the early days of grid computing, as one of the founders of DataGrid and as the head of the DataGrid test bed, which eventually

grew into Europe's Enabling Grids for E-science project and the European Grid Initiative and into the Worldwide LHC Computing Grid (LCG). He was at the core of a small team that decided, with strong support from CNRS, the resolute positioning of France in the grid initiatives. Under his guidance, the IN2P3 Computing Centre in Villeurbanne was set up as a powerful main node (Tier-1), while several strong secondary nodes (Tier-2) were in the making and LCG-France was taking shape.

With his internationally recognized expertise and highly appreciated management skills, François chaired several committees on computing at CERN and in France. He served for many years (1999–2006) as computing adviser for the IN2P3 director. His numerous talents gained him wide national and international recognition, from researchers as well as computing professionals. From 2006 to his retirement in 2009, he was head of the CNRS IT Division.

In daily life, François always had a friendly, dedicated and trustworthy attitude. More than a colleague, we have lost a friend. Our deepest condolences go to his family, particularly to his wife, and to his friends and colleagues.

- *His colleagues and friends at CCPM.*

OBITUARY NOTE

Godfrey Stafford 1920–2013

On 23 January, more than 200 people gathered at the Rutherford Appleton Laboratory to celebrate the life and legacy of Godfrey Stafford – one of the leaders in

the foundation of the laboratory and a former director (1969–1981), who died in July last year (*CERN Courier* November 2013 p43). For presentations and a webcast of the event, see <https://indico.cern.ch/event/298115/>.

MEETING

AWLC14, the **Americas Workshop on Linear Colliders**, will be held at Fermilab on 12–16 May. As the next in the series of regional linear-collider workshops held around the world, this meeting welcomes strong international participation. Its purpose is the continued development of the physics case for a high-energy linear electron–positron collider and the advancement of detector and accelerator designs. This meeting will particularly address the developments for

the International Linear Collider, which Japan is considering to host. The workshop will consist of plenary and parallel sessions as well as meetings of the collaborations involved in the development of linear colliders. The deadline for early registration is 4 May. For more information, visit www.linearcollider.org/awlc14/.

NEW PRODUCT

Edwards Limited has launched a special variant to its nXDS range of dry scroll

vacuum pumps, which is ideally suited for pumping rare or critical gases. nXDS dry scroll pumps are free of lubrication in the entire pumped path of the gas. The special variant nXDS-R is optimized for situations where an application demands the pumping or recirculation of rare or critical gases without the risk of accidental introduction of atmospheric air. The pump also features intelligent and easy-to-control functions with simple operation. For further information, visit www.edwardsvacuum.com.