

FACES AND PLACES

AWARDS

Fellowships for US lab directors

Two associate directors of US particle-physics laboratories were among the members of the American Association for the Advancement of Science (AAAS) to receive awards as new fellows at the 2006 AAAS Annual Meeting in St Louis, Missouri, on 18 February. They join other leading figures in US particle physics and related fields that were elected as new fellows by the AAAS Council during 2005.

Swapan Chattopadhyay, associate director for accelerators at the Thomas Jefferson National Accelerator Facility (Jefferson Lab), was awarded the distinction of fellow for his “fundamental contributions to accelerator science, including phase-space cooling, innovative collider designs and pioneering femto-sources, and for mentoring accelerator scientists at facilities worldwide, especially in developing countries”. He is responsible for all aspects of Jefferson Lab’s accelerator and Free-Electron Laser (FEL) programmes, including R&D and operations, maintenance and upgrades of the Continuous Electron Beam Accelerator Facility and the FEL.

Samuel Aronson, associate laboratory director for high-energy and nuclear physics (HENP) at the Brookhaven National Laboratory, became a fellow for his “leadership in the science and management of experimental particle physics, especially heavy-ion physics at Brookhaven National Laboratory”. The HENP directorate encompasses the Collider-



Swapan Chattopadhyay, left, and Samuel Aronson, received AAAS fellowships in February.

Accelerator Department, the Physics Department, the Superconducting Magnet Division, the Instrumentation Division and the Center for Accelerator Physics.

Neil V Baggett, advisor for planning and communication in the high-energy physics programme of the Office of Science of the US Department of Energy, was also elected as a fellow. He receives the honour “for significant achievements in fundamental physics research and for important contributions to the research and educational programmes of the US Department of Energy”.

In cosmology and astroparticle physics, Michael Turner, astronomy and astrophysics



professor at the University of Chicago, was honoured “for his exceptional research in the evolution of the earliest universe, explaining its significance to the public, and for co-founding the interdisciplinary field of particle physics and cosmology”.

Lastly, C W Francis Everitt, research professor at the Hansen Experimental Physics Laboratory of Stanford University also became a AAAS fellow. Everitt is principal investigator for Gravity Probe B, the NASA satellite launched in April 2004 that uses four ultra-precise gyroscopes to make precise measurements of the geodetic effect and the frame-dragging effect predicted by the general theory of relativity.

Honorary degree for CERN’s Fabio Sauli

The celebrations of the 30th anniversary of the Université de Haute Alsace in Mulhouse in October 2005 culminated in a ceremony to award CERN’s Fabio Sauli the title of *Doctor Honoris Causa*. The distinction, presented by Guy Schultz, university president, honours Sauli’s lifelong activity in the development of advanced detectors for particle physics.

Under Sauli’s direction, CERN’s Gas Detectors Development group – which was founded and led for many years by Georges Charpak – has continued to contribute many innovations to the field and to the training of a generation of scientists. Schultz himself was

Sauli’s doctoral student in the 1970s, and participated in developing high-accuracy drift chambers. The most recent development in the group, the Gas Electron Multiplier, has been adopted by experiments both at CERN and worldwide, owing to its exceptional performance with extreme particle fluxes.

Having reached the CERN age limit, Sauli retires this month, but intends to continue his scientific work in association with INFN-Trieste, contributing to the design of experiments making use of novel technologies, and lecturing on advanced instrumentation at various universities.



CERN’s Fabio Sauli, left, receiving the title of Doctor Honoris Causa from Guy Schultz, president of the Université de Haute Alsace. (Courtesy Université de Haute Alsace.)

CELEBRATION

La Sapienza honours Bernardini's 75 years...

Carlo Bernardini, one of the physicists who built the first electron-positron storage ring, AdA in 1960, celebrated his 75th birthday at a symposium held in his honour at the University of Rome La Sapienza. A description of the making of AdA and its first operation was reported in *Il Nuovo Cimento* on 19 December 1960 in an article entitled "The Frascati Storage Ring", by Bernardini, Gianfranco Corazza, Giorgio Ghigo and Bruno Touschek. Forty-five years later, Bernardini retired from teaching and his friends and colleagues paid homage to his long and multifaceted career.

The symposium, held on 5 December 2005, contained both a physics and technology session, including talks by Nicola Cabibbo, Emilio Picasso and Ugo Amaldi, as well as a science and society session. Cabibbo described the long list of physics results to have come out of electron-positron storage rings, from the early days of the first paper by Cabibbo and Raul Gatto on physics at electron-positron accelerators, published in *Physical Review Letters* in March 1960, to the



Carlo Bernardini, who celebrated his 75th birthday at a symposium held in his honour.

latest Belle and BaBar results, mentioning also the Large Electron-Positron collider (LEP) achievements in precision physics. Picasso recalled the early days of LEP construction, including the search for the site and the final decision. Amaldi focused on the importance of accelerators in medicine, noting the existence of nearly 9000 such accelerators in the world.

Another testimonial was given by Giuseppe Di Giugno, who recalled the historic night when electrons were first accumulated in AdA.

The afternoon session on science and society was chaired by Tullio de Mauro, former Minister of Education and well known linguistic scholar, who illustrated Bernardini's activity as Senator of the Italian parliament and his tenure as dean of science at La Sapienza University. The session also emphasized Bernardini's participation in the peace movement, Unione Scienziati Italiani per il Disarmo, and his contribution to public awareness of science as director of the science magazine, *Sapere*. Luciano Maiani, former director-general of CERN, chaired the final session, in which further testimonials were given by Bernardini's students and colleagues, among them Michelangelo de Maria, who noticed the extraordinary capacity of Bernardini to communicate with friends and antagonists alike. The symposium was closed by Giorgio Salvini, former president of the Istituto Nazionale di Fisica Nucleare and director of Frascati when AdA was built.

...and Princeton celebrates Polyakov's 60th

A special symposium was held at Princeton University on 5–6 November 2005 to honour Alexander Polyakov, a leading figure in theoretical high-energy physics. Polyakov received his Masters degree from Moscow Institute of Physics and Technology and his PhD from the Landau Institute of Theoretical Physics in Chemogolovka, where he stayed until 1989, before moving to Princeton University in 1990.

The first of Polyakov's papers, "Spontaneous symmetry breaking of strong interaction and absence of massless particles", was written with Alexander Migdal in early 1964, before Peter Higgs' famous papers were published. The two theorists, both 19 at the time, had essentially discovered what later became known as the Higgs mechanism. Owing to several unfortunate circumstances, this Migdal-Polyakov paper was published in the *Journal of Experimental and Theoretical Physics* only in 1966, two years after it had been completed.

Polyakov has since been instrumental in



From left to right: Alexander Polyakov, Mikhail Shifman and Paul Wiegmann at the symposium held in Polyakov's honour.

numerous developments with a profound impact on high-energy physics: the Migdal-Polyakov conformal bootstrap, 't Hooft-Polyakov monopoles, Belavin-Polyakov-Schwarz-Tyupkin instantons, Polyakov's Liouville theory and Polyakov strings. His 1984 paper "Infinite conformal symmetry in two-dimensional quantum field theory", with Alexander Belavin and Alexander

Zamolodchikov, has classic status; it became a Bible for string theorists. He was awarded the Dirac Medal in 1986, and the Lorentz Medal in 1994 for his work in quantum field theory, especially the theory of critical phenomena.

In the past decade Polyakov's results (along with those of Juan Maldacena and Edward Witten) played a crucial role in the emergence of the so-called holographic descriptions of quantum chromodynamics. Within this approach the theory of quarks and gluons is presented as a limiting 4D theory at the boundary of the 5D bulk, which is governed by a certain gravity model (AdS/CFT correspondence and its modifications). This line of research is currently experiencing an explosive development.

Polyakov's other interests include theory of turbulence and string cosmology. He has been a key contributor to Burgers turbulence, which is now a central interest for much of the hydrodynamics community.

OUTREACH

Record webcast unites physicists worldwide



Gareth Mitchell presents the webcast link from Imperial College London.

On 2 December 2005, towards the end of the World Year of Physics, CERN organized an international marathon webcast, Beyond Einstein, which for 12 hours brought together physics communities from the four corners of the globe. The event, the first of its kind organized on this scale, attracted 30 000 spectators on the web and in participating studios. Pakistani national television broadcast

all 12 hours of programming, an Italian channel also provided coverage, and many more people tuned in on satellite television.

The event was broadcast live on the Internet from CERN's Globe of Science and Innovation, and similar locations around the world were connected via Tandberg videoconference – the Telecom Future Centre in Venice, Imperial College London, Fermilab, the Exploratorium in San Francisco with scientists from SLAC, the Bloomfield Science Museum in Jerusalem and the National Science Education Centre in Taipei). From these seven main platforms, viewers were taken on a world tour to other physics laboratories and science museums, visiting virtually every time zone. In a particular highlight, and one of the most technically difficult sections of the show, CERN and Imperial College linked up with the South Pole to discuss the IceCube experiment, neutrino physics and the search for dark matter.

● See <http://beyond-einstein.web.cern.ch/beyond-einstein/>.

New particle-physics website for the UK is open to everyone

2006 sees the arrival of a new UK website that is dedicated to particle physics – Particle Physics UK. This new site is an update of the previous ppUK site and aims to provide a portal to all the best particle-physics information on the web.

As the international entry point to particle physics in the UK from Interactions.org and other sites for global experiments, the new site will include links to all the UK particle-physics groups, as well as academic databases, seminar dates, pages for the general public, resources for teachers and news updates from around the UK. In the future, the site will also provide a strong



The new Partical Physics UK website is aimed at anyone with an interest in the field.

platform for promoting the Large Hadron Collider in the UK.

The Particle Physics and Astronomy Research Council is funding the new website, which is hosted at the CCLRC Rutherford Appleton Laboratory.

● www.particlephysics.ac.uk.

Science on Stage '05 illuminates physics



The opening ceremony included a dazzling juggling show with dramatic light effects, augmented by a teachers' sheet explaining some of the scientific concepts of juggling.

The 2005 Science on Stage festival was held at CERN on 21–25 November, when 500 or so participants from 27 countries – mainly science teachers but also some university lecturers, science-outreach specialists and students – had the opportunity to share their experience of teaching science. They attended presentations and shows, took part in workshops and visited a fair with stands offering ideas on how to make school science lessons more appealing.

The festival, organized by the EIROforum partnership between major European science institutions including CERN, marked the end of two years of projects promoting science in most of Europe; the most exceptional projects from each country were presented at the festival. To allow teachers to benefit from the ideas presented, all the demonstrations will be available on the Science on Stage website at www.scienceonstage.net.

MEETINGS

The 6th Rencontres de Vietnam will be held in Hanoi on 6–12 August. This international conference will focus on Challenges in Particle Astrophysics, and topics include ultra-high-energy cosmic rays, dark matter, dark energy, neutrinos and gravitational waves. An important motivation is to provide a means of contact between the Vietnamese and the Western scientific communities. More detailed information on the conference can be found at <http://vietnam.in2p3.fr/2006/>.

WORKSHOP

Vertex 2005 is a cascade of information

The annual Vertex meeting is traditionally held near water and this year's meeting was no exception. The 14th International Workshop on Vertex Detectors, Vertex 2005, was held on 7–11 November at Nikko, Japan, at a site surrounded by lakes, waterfalls, mountains and historical monuments, all of which were made more spectacular by splendid autumn colours.

Forty-eight invited participants came to Nikko to discuss topics related to vertexing and tracking. Major ongoing experiments such as BaBar, Belle, DO, ZEUS, CDF, PHENIX, ATLAS, ALICE, CMS and LHCb reported on their vertex detectors and upgrade plans. Many talks reported developments from ongoing R&D projects across the world aimed at future large-scale high-energy physics projects, especially the Super LHC (SLHC)

and the International Linear Collider (ILC). Other highlights included talks on the use of silicon detectors at a neutrino factory, and on the application of high-energy physics vertex-detector technology in medicine (the DEAR-MAMA project), X-ray crystallography (PILATUS), in space (GLAST) and as diagnostic instrumentation for current and future tokamak fusion experiments.

Radiation hardness is already one of the important keywords for current detectors. Future upgrades in luminosity, such as at the KEKB B-factory and at SLHC, pose major challenges to designers of vertex detectors, and it was pointed out that for the ILC “better” detectors are needed, rather than “bigger.” For front-end electronics the “big four” goals remain lower power, low mass, ever-higher



Vertex 2005 participants gathered in Nikko.

radiation tolerance, and higher speed/performance. These goals must be met at the same time as practical challenges such as process obsolescence, cost and complexity of new processes are addressed.

In addition to the intensive sessions and discussions in the corridors, the participants enjoyed a tour of the world-famous shrines and temples of Nikko, a banquet of Japanese dishes, and refreshing hot-springs.

• Proceedings are available online at <http://www-conf.kek.jp/vertex2005/>.

OBITUARIES

Carlo de Marzo 1941–2005

Carlo de Marzo died on 24 September 2005 after a short fight with cancer. He was Professor of Experimental Physics in Bari, where he taught courses in general physics and in nuclear and subnuclear physics. During his long scientific and academic career he held important positions and was a member of several scientific and administrative committees. He was director of the Istituto Nazionale di Fisica Nucleare, Bari section, from 1982 to 1988 and of the physics department at the University of Bari from 1987 to 1993.

Carlo was born in Torino, Italy, on 26 May 1941. He graduated in 1967 in physics at the University of Bari, under the supervision of G Giannelli. He then joined the group coordinated by L Guerriero. Carlo did experimental research at Brookhaven National Laboratory and Argonne in the US on pion–nucleon scattering experiments, making important contributions to detector development, as well as to the implementation of innovative data-analysis techniques. He then participated in hadron–nucleon scattering experiments at Fermilab and in deep-inelastic hadron–proton scattering experiments at CERN. Since 1986 his research activity focused on astroparticle physics. He promoted



international experiments, in which many young researchers from Bari participated under his leadership. These included the MACRO experiment at the Gran Sasso Laboratories.

One of Carlo's interests was the search for antimatter in space. He became actively involved in the Wizard experiment, carried out by a large international collaboration, including NASA. The experiment used complex detectors mounted on balloons flown at a height of 40 km. The research was later pursued through the construction of the PAMELA detector, to be flown soon on a Russian satellite at heights of

300–600 km. Recently Carlo became interested in neutrino astrophysics and in underwater neutrino telescopes. He was the Italian representative in the ANTARES experiment and was promoting the NEMO Project for a second-generation neutrino telescope, both in the Mediterranean Sea.

The results of Carlo's activities have been published in more than 240 papers in international journals and in conference proceedings. He wrote teaching notes and textbooks, among which *Maxwell e la fisica classica* (*Maxwell and classical physics*) was published by Laterza, Bari in 1978.

Carlo attached great importance to the popularization of science. He wrote articles and gave several talks on astroparticle physics and the history of science. He was very active in the cultural life of Castellana Grotte, his home town, and in particular in the Circolo Culturale Pivot and in the Gruppo Puglia Grotte (a speleological society). During his prolific scientific and academic activity, Carlo was a guide for many young students in physics, several of whom now work in research institutions and in university education. *The MACRO, PAMELA, ANTARES and NEMO collaborations.*

Eugene L Feinberg 1912–2005

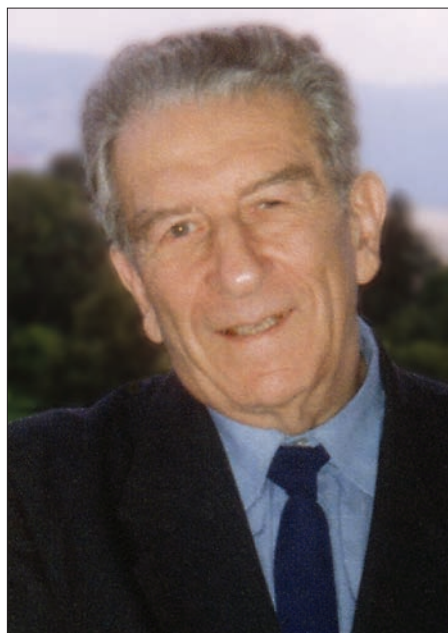
Eugene Feinberg, the doyen of the Theory Department of the P N Lebedev Physics Institute and one of the patriarchs of Russian science, has passed away. His name is associated with an unquenchable and lively interest in a wide range of physics problems. He possessed a harmonious combination of logic and intuition characteristic of the highest level of intelligence.

Feinberg, born in Baku, moved with his family to Moscow in 1918. He graduated from Moscow University and three years later started work in the Theory Department of the Lebedev Physical Institute. In his PhD thesis in 1939 he formulated the theory of ionization of atoms in nuclear beta decay. The guiding idea was that the atom is ionized as a result of a “shake-up” of atomic electrons when the charge of the nucleus changes, and the work led to a series of theoretical and experimental studies. This interest in nuclear and high-energy physics remained throughout Feinberg’s life, but it did not set boundaries on his scientific activities.

During the Second World War Feinberg actively worked on radiophysics problems directly tied to his country’s military potential. He worked out novel approaches in the theory of radiowave propagation along the surface of the globe, which were drastically different from the Sommerfeld–Weyl approach. As a result he solved difficult and important problems. (His results were summarized in the 1961 monograph *Propagation of Radio Waves along the Earth’s Surface*, which was reprinted in 1999). In 1943 he created a new method for the objective recognition of an acoustic signal in the presence of high-level disturbances, which was verified in practice, and then together with S G Gershman, he designed a system that was later widely used by the navy.

Feinberg later worked on the theory of the uranium–graphite reactor and neutron deceleration (1944–1949) and discovered the monochromatization of neutrons as they slow down. This led to the suggestion, with L E Lazareva and F L Shapiro of a method of neutron spectrometry based on the deceleration time.

Notable among Feinberg’s earlier results in nuclear and particle physics are his prediction of coherent inelastic processes in the



Feinberg in 1998. (Courtesy A Martin.)

meson–nucleus interaction (1941) and of diffraction dissociation of hadrons together with Isaak Pomeranchuk (1953). In similar work Feinberg formulated for the first time, and solved in principle, the problem of the existence and observability of the electron in a non-equilibrium state, when the electron has partly lost its electromagnetic field. He expanded his conclusions to non-equilibrium hadrons whose properties can be studied via their subsequent interactions with nucleons inside a nucleus. The solution of this problem is closely connected with the understanding of the important role of interference phenomena and of the process formation time when a particle travels through matter.

Feinberg paid special attention to the mechanism of inelastic processes in high-energy interactions of hadrons. In 1951–1953 he was already emphasizing the importance of peripheral processes in hadronic interactions. The one-meson exchange model later developed by his pupils formed the foundation of the multiperipheral scheme of inelastic processes. He later predicted the direct generation of leptons and photons in a hot hadronic medium (1959–1961) and quark–gluon plasma (1976), as well as the generation of hadrons

with high transverse momenta (1967). Hundreds of physicists are now studying these effects. He also calculated production cross-sections for deuterium, tritium and helium antinuclei, which were later confirmed experimentally, and contributed to the ideas and papers of the last 10 years on clarifying the role of constituent quarks in extreme states of nuclear matter.

Feinberg also made considerable contributions to cosmic-ray physics and had close ties with experiment. During his last years he actively worked with experimentalists on automatic pattern recognition in emulsions.

In 1966 he became correspondent of the USSR Academy of Sciences and in 1997 full member of the Russian Academy of Sciences. He received numerous prestigious prizes.

In addition to science, Feinberg’s interests included fiction, music and art. Indeed, his late wife, daughter of an old Bolshevik executed by Stalin upon his return from exile, was a distinguished musicologist. He discussed the problems of interrelationships of science and art in his book *Cybernetics, Logic, Art* (1981) later translated as *Art in the Science Dominated World* (1987) and in *Two Cultures* (translated as *Zwei Kulturen*, 1988). His essays on great scientists of the 20th century were collected in *The Epoch and the Personality* (1999). Feinberg was also a brilliant lecturer and teacher, presenting subjects with ultimate clarity; he taught in Gorkii and in Moscow.

The purity of his moral principles, was the most salient feature of Feinberg’s personality. This dictated his active position as a citizen, his engagement in propagating the truly scientific view of the world and in revealing pseudoscience for what it is. His deep involvement in the fate of his fellow citizens was shown most vividly in his support of Andrei Sakharov during Sakharov’s exile to Gorkii and in his defence of the memory of Sergei Vavilov against unjustified accusations. Feinberg’s enormous charm attracted numerous people towards him. For this reason, he had many friends in Russia and in the world, in particular at CERN. They will always remember him.

Igor Dremine, Lebedev Institute, and André Martin, CERN.

Richard Dalitz 1925–2006

The Dalitz plot, Dalitz pairs and Castillejo–Dalitz–Dyson poles have made the name of Dick Dalitz, who died on 13 January, a byword in high-energy physics for half a century. With his death, international physics has lost a major figure and Britain has lost one of its greatest unsung scientists.

Born in Dimboola, Australia, Dalitz gained degrees in mathematics and physics at Melbourne University, moving to the UK in 1946 to study for a PhD at Cambridge. He then worked at Bristol University for a year, before joining Rudolf Peierls in Birmingham in 1949. In 1953 he was given leave to visit the US for two years, working primarily at Cornell. He then joined the faculty at Chicago and its Enrico Fermi Institute for Nuclear Studies in 1956. He returned to the UK to work again with Peierls in 1963, this time as Royal Society Research Professor at Oxford University, a post he held until his retirement in 1990.

Dalitz's thesis was in nuclear physics and dealt with 0^+ to 0^+ transitions in oxygen; forbidden as transitions involving real photons, due to angular momentum conservation, they occur by means of e^+e^- emission. This experience led him to his first seminal contribution with his work at Birmingham in 1951 on Dalitz pairs, a phenomenon that has been used for example to measure the parity of the π^0 .

Among the particles found in cosmic rays at this time were two known as the τ and the θ , which had the same mass and lifetime; however, the τ decayed into three pions, the θ into two. In 1953 Dalitz began to look at the decays of the τ into three pions and in doing so introduced into physics what he modestly called a "phase-space plot", but which everyone now knows as the Dalitz plot. This revealed that the τ particle had even spin and odd parity, eg $J^P = 0^-$, while the decay $\theta \rightarrow 2\pi$ and conservation of parity implied $J^P = 0^+, 1^-, 2^+ \dots$ for the θ . Thus was born the τ - θ puzzle: how could two mesons have the same masses and lifetimes and yet have different quantum numbers?

The puzzle persisted for two years, during which Dalitz mused to colleagues that perhaps the law of parity was not true, even though all the evidence said otherwise. However it was



Richard Dalitz, who died in January, aged 80.

T D Lee and C N Yang who realized that the law of parity had been tested only for the strong and electromagnetic interactions. For the weak interaction at work in the θ/τ decays, it was an open question, and it was Lee and Yang who earned the Nobel prize when experiment proved their hypothesis correct that the weak interaction violates parity. The τ and θ are indeed the same particle, known today as the charged kaon.

By the end of the 1950s Dalitz plots were being made of data coming from bubble chambers at the new high-energy particle accelerators. Soon the first examples of what would eventually turn into scores of short-lived resonances were found.

It was around the time that Dalitz moved to Oxford, in 1963, that a path through the maze of particles opened up. Murray Gell-Mann gave the name "Eightfold Way" to the emerging idea that the particles could be

collected into families based on a more fundamental trio of "quarks". What was less clear was whether these quarks were just a mathematical convenience or were themselves real particles.

For Dalitz, quarks were real. In his model, the laws that determine the rotational states that electrons can take up within atoms were applied to the quarks within the proton and the resonances. In a remarkable talk in Tokyo in 1965 he proposed that the quarks could be raised into different energy states, following the established rules of non-relativistic quantum mechanics. This implied the existence of many baryon resonance states with spins and parities in agreement with the emerging data.

Over the following decades many other examples of meson and baryon resonances were discovered, notably by application of Dalitz plots, and the quark model became established as the explanation of the menagerie of particles.

Dalitz was also interested in hypernuclei – atomic nuclei in which a nucleon had been replaced by a strange baryon. He collaborated with Avraham Gal in this area for many years. He was also intimately involved with the identification of the top quark. With Gary Goldstein he worked out a geometrical method by which experimental data could be used to deduce the top mass, which they applied to an early possible event from Fermilab. The conclusion was that if this event indeed signalled top production, the top quark mass must exceed 130 GeV.

Dalitz brought many scholars to Oxford and trained generations of students, including Chris Llewellyn Smith, a future director-general of CERN. Following retirement he remained an inspirational figure to students new and old, continuing to work on theoretical physics with undiminished enthusiasm.

Among activities outside of physics, Dalitz researched the origins of the Dalitz name, and wrote on the history of the Wendish people, who survive to this day in a few villages between Cottbus and Berlin. His curiosity led him to cast new light on aspects of Wendish history, including a biography of the poet Mato Kosyk.

Frank Close, Oxford.

HAPPY 40TH BIRTHDAY CERN COMPUTING NEWSLETTER!

Since 1966, the CERN Computer Newsletter (CNL) has reported on the changes and trends in computing facilities at CERN and sites across the globe.

To improve the communication between the CERN IT Department and users from around the world, several changes have been made to CNL to reach an even wider audience:

- Alternate issues of CERN Courier now include the Computing News section
- New online version of the CNL is available at cerncourier.com

If you want to promote your product, service or company in this lucrative new area, the Computing News section offers a unique route to the decision makers and key figures at the forefront of computing research.

To discuss your requirements for a bespoke package suited to your budget, contact Edward Jost

Tel: +44 117 930 1026

E-mail: edward.jost@iop.org

COMPUTING NEWS

ETICS is a federation of three 'locking management authorities', one covering the EU and beyond (see www.etics.org), one for the Americas (www.etics.org), and one for Asia-Pacific (www.etics.org). Individual members are national verification authorities.

CONFERENCE

Python developers swap ideas

The European Python community came together in 2005 for the annual EuroPython conference, held at the University of Cambridge in the UK. The conference was the first to be held in Europe since 1999, and was a great success. The conference was held at the University of Cambridge, and was a great success. The conference was held at the University of Cambridge, and was a great success.

COMPUTING NEWS

ETICS assures quality on the Grid

On 3 January 2006, an EU-funded project was launched that will improve the reliability and quality of Grid software. The project is called ETICS (European Trusted Information Computing System) and is led by the University of Cambridge. The project is called ETICS (European Trusted Information Computing System) and is led by the University of Cambridge.

COMPUTING NEWS

Grid highlights Grid potential

At the end of 2005, the CERN Courier highlighted a joint event on Grid computing. The event was held at the University of Cambridge, and was a great success. The event was held at the University of Cambridge, and was a great success.

COMPUTING NEWS

Grid researchers get one online identity

A new Grid initiative is helping scientists around the world to access computer and network resources. The initiative is called the Grid Initiative, and is led by the University of Cambridge.

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CERN
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