

G N Flerov prize

In October, the Joint Institute for Nuclear Research will award the G N Flerov prize to the winner of the contest for outstanding research in nuclear physics. The contest is for individual participants only. The winner will also receive \$1000. Participants should send an abstract of their research, enclosing copies of major contributions, to be received by 1 October, to Dr Andrew G Popeko, Joint Institute for Nuclear Research, Flerov Laboratory for Nuclear Reactions, Dubna, Moscow Region, 141980, Russia. Tel. (7 096) 21 65958. Fax (7 096) 21 65083. E-mail "popeko@sunvas.jinr.ru".

Enrico Fermi award

Maurice Goldhaber wins a prestigious US Enrico Fermi award "for his lifetime of distinguished research". This began in Rutherford's lab in Cambridge in 1934, when Goldhaber and Chadwick measured the mass of the newly discovered neutron. Another physics milestone was his widely admired 1958 experiment at Brookhaven, with Grodzins and Sunyar, measuring the helicity of the neutrino, only two years after the elusive particle had first been observed. Goldhaber served as Brookhaven's director from 1961 to 1973.

Meetings

- Photon 99, the international conference on the structure and interactions of the photon, will be held in Freiburg, Germany, on 23–27 May. The programme will cover photon structure, diffraction, resonance production and photon physics at a linear collider. Further information is available at "<http://ruhp8.physik.uni-freiburg.de/p99/>".
- Tel Aviv University is organizing an international workshop that will address subject areas that are at the frontiers of QCD. Challenges in QCD will take place at Kfar Giladi, a kibbutz in northern Galilee, Israel, on 20–23 June. Further information is available at "<http://www-nuclear.tau.ac.il/~qcd99/>".
- The International Workshop on Polarized Sources and Targets, PST99, will be held on 29 September – 2 October in Erlangen, Germany. The programme will cover polarized ion sources and gas targets, polarized electron sources and polarized solid targets. For further information, contact E Steffens, Physikalisches Institut, Universität Erlangen-Nürnberg Erwin-Rommel-Str. 1, D-91058 Erlangen, Germany. Tel. +49-9131 852 7093. Fax +49 9131 15249. E-mail "pst99@physik.uni-erlangen.de". Internet "www.physik.uni-erlangen.de/pst99/".

Glenn Seaborg 1912–99



US Atomic Energy Commission chairman Glenn Seaborg (right) and Fermilab founding director Bob Wilson brandish a shovel at formal groundbreaking for Fermilab in 1968.

Glenn Seaborg, who shared the 1951 Nobel Prize for Chemistry with Edwin McMillan for their initial discoveries of the transuranic elements, died in February.

After an initial degree in chemistry from UCLA, Seaborg moved to Berkeley for his graduate studies, earning his PhD in 1934 under Ernest Lawrence for neutron research using the new cyclotron.

Using a Berkeley cyclotron to bombard uranium with neutrons, McMillan and Philip Abelson discovered the first transuranic element, neptunium, and soon afterwards Seaborg and his colleagues supplied the first nuclei of the next element, plutonium. Seaborg also discovered its fissionable 239 isotope and went on to play a major role in the wartime effort to manufacture plutonium for a bomb. With the weapon ready, Seaborg was in favour of a test demonstration rather than actually dropping the weapon. For the remainder of his life, he remained a staunch advocate of nuclear arms control and limitation.

From 1961 to 1971 Seaborg was chairman of the US Atomic Energy Commission, then the main overseer of the national particle physics programme. During this time US particle physics boomed, with the construction of major new laboratories around big machines.



Some 36 students between the ages of 17 and 18 from schools in London and Stockholm recently visited CERN as part of their science studies. The idea was the brainchild of Erik Johansson of Stockholm and the Delphi experiment, and the highly successful visit was organized by Johansson and Christine Sutton of Oxford in their roles as Swedish and UK representatives of the European Particle Physics Outreach Group.

Harry Lehmann 1924–98

Harry Lehmann, who died of cancer in November, was the founder of theoretical particle physics in Hamburg, and over a period of 30 years he moulded the character of the II Institute of Theoretical Physics. He also contributed much to the shaping of DESY.

One of the founding fathers of modern quantum field theory, much of Lehmann's pioneer work in the 1950s was in collaboration with Kurt Symanzik and Wolfhart Zimmermann – the shorthand LSZ is still familiar to all elementary particle physicists. This formalism and the Lehmann representation are among the most important basic tools of elementary particle theory.

Born in Güstrow in 1924, Lehmann went to school in Rostock before being conscripted and shipped to North Africa, where he was taken prisoner in 1943 and taken to a camp in the US. Released in Stuttgart, he returned to his parents in Rostock, where he became a student of physics, later moving to the Humboldt University in Berlin.

After doctoral work with Hund in Jena, East Germany, he moved in 1952 to the Max Planck Institute in Göttingen, West Germany, which was presided over by Heisenberg. He

never returned to the German Democratic Republic – his formal application for prolongation of leave was never answered. In 1956, after a year in Copenhagen, he accepted a prestigious professorship in Hamburg as a successor to Lenz.

The destiny of high-energy physics in Hamburg was then being charted, with Willibald Jentschke pushing for the establishment of DESY. Lehmann was a long-time member of DESY's scientific council, doing much to create and promote the Theory Division. He persuaded Kurt Symanzik and many other leading scientists to come to DESY. In the early 1960s he resisted a tempting offer from Institut des Hautes Etudes Scientifiques (IHES), Bures-sur-Yvette.

The development and scientific attraction of his institute was his personal ambition and he was extremely proud of its success. The institute's Tuesday afternoon theoretical seminars have become legendary. Lehmann's criticism at these meetings could be quite aggressive, but towards young scientists he was benevolent and helpful. Junior scientists became fascinated by Lehmann's personality and behaviour, not to mention the unerring accu-



Harry Lehmann 1924–98.

acy of his judgement. He was much appreciated as a teacher and examiner.

Lehmann received many honours, including the Max Planck medal of the German Physical Society in 1967, the Dannie Heinemann prize of the American Physical Society in 1997 and the order Pour le mérite.

We remember him with gratitude.
Gerhard Mack.

Venedict P Dzhelepov 1913–99

Renowned Russian scientist Venedict Petrovich Dzhelepov died suddenly on 12 March. He was one of the founders of the Institute of Nuclear Problems (1948) and later of the Joint Institute for Nuclear Research in Dubna, where he was director (1956–88). From 1988 he was honorary director of the Laboratory of Nuclear Problems.

His long career in science has many landmarks. In 1949 he constructed what was then the world's largest proton synchrocyclotron, reaching 680 MeV. This was later (1984) converted into a high-current phasotron with a shaped magnetic field. He obtained pioneer data in nucleon–nucleon and pion–nucleon interactions, in the capture of negative muons by protons, and in the electron decay of negative pions.

New results were achieved in the multiple production of strange and neutral particles and in hypercharge exchange reactions. Dzhelepov was the first to obtain the funda-

mental, now classical, experimental results on muonic molecules and the muon-catalysed nuclear fusion of heavy hydrogen isotopes. The USSR Academy of Sciences awarded him the IV Kurchatov gold medal and prize for these investigations.

Dzhelepov was also well known for his work on high-current accelerator complexes in the 0.8–1.5 GeV range based on isochronous cyclotrons. He initiated and supervised the construction of Russia's first medical physics complex, based on the synchrocyclotron of the Laboratory of Nuclear Problems, for the proton treatment of cancer and for space medicine.

He was a corresponding member of the Russian Academy of Sciences, for many decades one of the leaders of the Nuclear Physics Division of the Russian Academy of Sciences, and a winner of Russian State prizes. As a member of IUPAP commissions, and ICFA and editorial boards of highly



Venedict P Dzhelepov 1913–99.

authoritative scientific journals, he made a substantial contribution to the development of the international scientific co-operation. Many eminent scientists in Russia and other countries learned much from working with him.