

# People and things

**A tribute to Louis de Broglie, who died in March, will appear in our next issue.**

Paul Matthews 1919-1987

breaking force and particles will be a principal goal of the next generation of particle accelerators currently under construction or proposed for the next decade. Two big electron-positron colliders, the SLC (Stanford Linear Collider) scheduled to begin operation this year, and LEP at CERN, which will begin operation in 1989, will be able to search for a possible symmetry-breaking particle called the 'Higgs boson' provided it is not heavier than about half the mass of the W particle.

The Tevatron proton-proton collider now in action at Fermilab provides the highest collision energies in the world and will search for 'supersymmetric' particles which could generate the lowest energy symmetry-breaking state inducing the W and Z masses.

One of the attractions of still higher energy projects such as the US Superconducting Supercollider, SSC, or a proton collider in the LEP tunnel at CERN, providing collision energies many times that of the Tevatron, is that the symmetry-breaking mechanism, whatever it might be, is more likely to show itself. Even if the new particles are too heavy to be produced directly, they should betray their presence by inducing an abnormally large number of collision products containing pairs of W and Z particles. If the new particles are not so heavy, the abnormal W and Z pair products will not be seen, but instead the new particles will themselves be copiously produced and could be studied in detail.

*From a paper by Michael Chanowitz of Berkeley presented at the recent meeting of the American Physical Society and the American Association of Physics Teachers in San Francisco.*

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## On people

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*Yuri Orlov has joined Cornell as Senior Research Scientist. His research interests there include accelerator theory (nonlinear dynamics) and the application of quantum mechanics methods to the study of human perception and psychology.*

*Ernst Wilhelm Otten of Mainz receives the Genter-Kastler Prize awarded by the Société Française de Physique and the Deutsche Physikalische Gesellschaft. The award was established in 1986 and went first to Edouard Brezin of Saclay for his work on phase transitions. Otten is thus the first German to receive the award. His scientific work centres on the study of nuclear properties through atomic hyperfine structure measurements using sophisticated techniques. Much of this has been carried out at the ISOLDE on-line isotope separator at CERN.*

*The Wigner Medal for 'outstanding contributions to the understanding of physics through group theory' goes to Feza Gürsey of Yale for 'his essential role in the discoveries of symmetries in particle physics'.*

*Retiring from CERN is emulsion specialist Guy Vanderhaege. When he arrived from Brussels some thirty years ago, emulsions were one of the major methods used in particle physics. Over the years, detector fashions have come and gone. Apart from a spell in administration, he has always remained an enthusiastic proponent of emulsion experiments, and has played a vital role in coordinating the CERN emulsion programme.*



*Wheels turn in circles, and emulsion experiments now make up one of the largest user groups for the new high energy ion beams at CERN.*

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## Paul Matthews

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*British theoretician Paul Matthews died after a road accident in February. Maturing in the heady days of modern field theory in the 1950s, he made many important contributions to its development. After work at Princeton, Cambridge, Birmingham and Rochester, he developed, with Abdus Salam, an influential theory school at London's Imperial College. At CERN, he was a member of the Scientific Policy Committee from 1972-77. An outstanding teacher and far-sighted administrator who also found time to write several books, he chose after his retirement to return to Cambridge, quietly to pursue physics.*

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## George H. Vineyard

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George H. Vineyard, former Director of Brookhaven National Laboratory and President-elect of the American Physical Society, died in February. During his period as Brookhaven's Director from 1973-1981, the Laboratory pursued a strong programme in basic research and, in response to national needs, considerably increased its applied research, particularly in the energy area. Also during his tenure, the National Synchrotron Light Source, the world's most powerful source of X-rays and ultraviolet light, was developed and constructed. He resigned as Laboratory Director to return to full-time research in theoretical solid state physics.

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## CEBAF progress

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On Friday February 13, bulldozers began clearing a 200 acre (80 hectare) site at Newport News, Virginia, for the proposed US Continuous Electron Beam Accelerator Facility (CEBAF) to provide high energy electron beams for nuclear physics. Some 16 million dollars of construction funding is available this fiscal year, but the main construc-

tion budget request of 33.5 million dollars is still in the pipeline.

A status report on the project and plans for the scientific programme will be discussed at the 1987 CEBAF Summer Workshop from 22-26 June. This will also include the annual users group meeting.

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## Meetings

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The XI International Workshop on Weak Interactions will be held in Santa Fe, New Mexico, from 14-19 June. Discussion sessions covering current topics in weak interaction physics will allow active participation by workshop attendees. Both accelerator- and non-accelerator-based research will be on the agenda. For information contact G. J. Stephenson, MS D434, Los Alamos National Laboratory, Los Alamos, New Mexico 87545, USA.

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## Workshop on SSC experiments

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The Division of Particles and Fields of the American Physical Society and the Central Design Group of the proposed US SSC Superconducting Supercollider are organizing a Workshop on Experiments, Detectors and Experimental Areas for the SSC, to be held at Berkeley from 7-17 July. The primary goals are to explore the SSC's experimental possibilities and their impact on the machine parameters. There will be four large working groups — covering high, intermediate and low transverse momentum physics, and exotic particle searches. Further information from the Workshop Secretary, Lawrence Berkeley Laboratory, , 50B-2270, 1 Cyclotron Road, Berkeley CA 94720, USA.

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Group photograph of Fermilab Users Executive Committee members. Standing (left to right): Phyllis Hale (Fermilab), Daniel Green (Fermilab), Anna Jean Slaughter (Yale), Thompson Burnett (Washington), Bruce Winstein (Chicago), David Buchholz (Northwestern), Majorie Shapiro (Harvard), Neville Reay (Ohio) and James Wiss (Illinois). Seated are Hugh Montgomery (Fermilab, Secretary), Tom Ferbel (Rochester, Chairman) and Melissa Franklin (Illinois). Not on the photograph are overseas members Rosanne Cester (Turin) and Angelo Scribano (INFN, Pisa).

(Photo Fermilab)





### Supernova neutrinos

*As southern hemisphere astronomers witnessed a gigantic supernova explosion towards the end of February, underground neutrino detectors all over the world picked up bursts of particles. Details in next issue.*

*At CERN, Herbert Lengeler (back to camera) introduces Federal German Research and Technology Minister Heinz Riesenhuber (left) to superconducting cavities such as will be used to take the energy of LEP's electron and positron beams towards 100 GeV. Looking on is CERN Director General Herwig Schopper.*

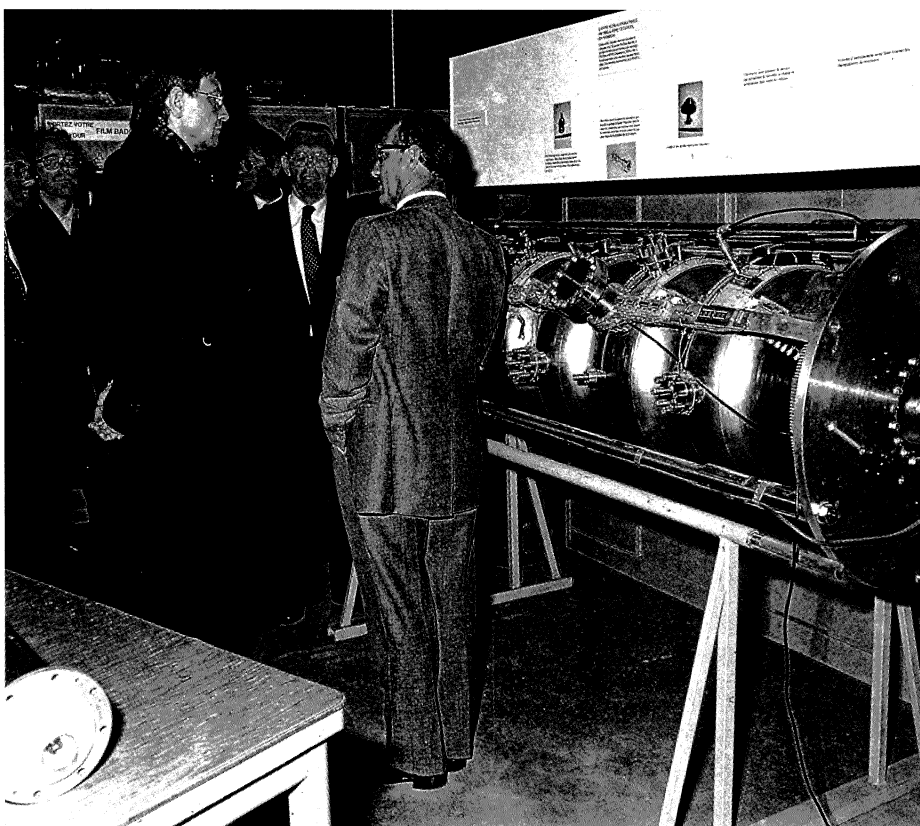
(Photo CERN 851.2.87)

## CERN Courier tops 20 000

*In February, the total monthly circulation of the CERN Courier topped the 20 000 mark (English edition more than 14 000 copies, French edition more than 6 000). The circulation has risen steadily over the years, but heavy demand for copies in recent months has pushed the figure up faster. Distribution centres are listed on page III.*

### Going down in history

*Among the CERN pioneers present at the small ceremony to launch publication of the first volume of CERN's History (see March issue, page 27) was Edoardo Amaldi. With characteristic perceptiveness, he commented that he had learned much from the book about what had been going on around him in those early days, adding that he was glad he hadn't known at the time, otherwise he could never have carried on! After suspecting that only those with good secretaries leave enough archive material to interest historians, he recalled some of the events of the early days which the historians had missed. According to Amaldi, much of the 'CERN spirit' derived from regular frequentation of a small Paris bistro near UNESCO headquarters.*



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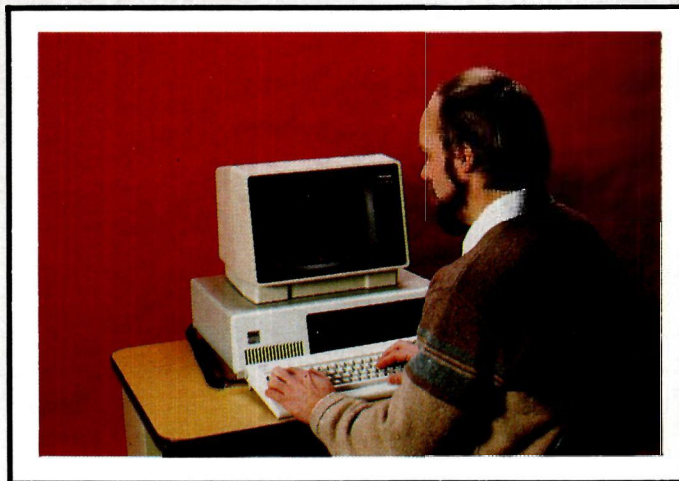
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