

High Stability Superconducting Magnet Power Supply



The Model 625 features:

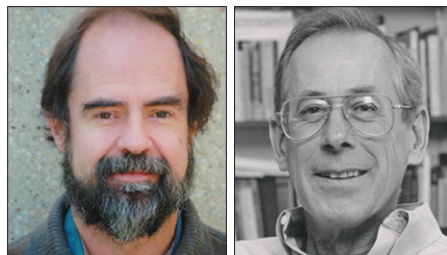
- 60 A/5 V, bipolar, true 4-quadrant output
- 0.1 mA output setting resolution
- Linear regulation minimizes noise
- Ripple $\leq 0.007\%$ of maximum current (into a 1 m Ω load)
- 1 mA per hour stability
- Parallel operation to ± 120 A
- CE compliant to both the low voltage directive and the electromagnetic compatibility (EMC) directive

LakeShore®

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CAREERS

Movers & shakers



Every one a winner – clockwise from the top left, James Gunn, James Peebles (both of Princeton University) and Martin Rees (Cambridge University).



Three cosmologists – **James Gunn**, **James Peebles** and **Martin Rees** – have shared the 2005 Crafoord Prize for their “contributions towards understanding the large-scale structure of the universe”. The \$500 000 prize is awarded by the Royal Swedish Academy of Sciences and recognizes research in mathematics, astronomy, ecology or geosciences – disciplines that are often ignored by the Nobel prizes. Gunn and Peebles (Princeton University) and Rees (Cambridge University) were credited with making “revolutionary contributions” to the understanding of how the universe evolved from a smooth primordial soup of particles and radiation into the galaxies and clusters we see today.

Federico Capasso of Harvard University, **Frank Wilczek** of the Massachusetts Institute of Technology and **Anton Zeilinger** of the University of Vienna have won this

year’s \$200 000 King Faisal International Prize for science. Capasso was recognized for designing the quantum cascade laser, Wilczek was credited for his work on the theory of the strong force, while Zeilinger was praised for his work on quantum teleportation and quantum cryptography. King Faisal, who died in 1975, was a son of the founder of Saudi Arabia and the kingdom’s third monarch. Wilczek is one of a total of nine winners of the various King Faisal prizes to have also won a Nobel prize.

Charles Bennett of the Johns Hopkins University has won the \$15 000 Henry Draper medal from the National Academies of Sciences (NAS) for his “contribution to the precise determination of the age, composition, and curvature of the universe through his leadership of NASA’s Wilkinson Microwave Anisotropy Probe”. The NAS also gave its \$20 000 Arctowski medal to **Edward Smith** of the Jet Propulsion Laboratory in Pasadena for his “pioneering studies of the solar and heliospheric magnetic fields in deep space and of planetary magnetic fields and their interaction with the solar wind”. The \$20 000 Arthur L Day prize and lectureship, meanwhile, went to **Herbert Huppert** of the University of Cambridge for his “fundamental research into the fluid mechanics of natural and multi-phase flows and for pioneering the field of geological fluid mechanics”.

Paul Williams from Reading University has been awarded the 2004 Blackwell prize of the Royal Astronomical Society for the best doctoral thesis in the UK. His thesis, which he carried out while at Oxford University, was on the behaviour of waves in the Earth’s atmosphere.

Careers update

E-xcited about e-science?

When the Large Hadron Collider comes online at CERN in Geneva in 2007, it will generate such vast amounts of data that researchers have developed a new form of computing technology – known as the Grid – to deal with it. Information will be transmitted over the Internet to different computers to ensure that it can be processed more quickly and efficiently than would be possible with a single device. Anyone wishing to learn more about the Grid and other forms of distributed computing can now take a new master’s degree in “e-science” at Edinburgh University in the UK. Based at the National e-Science Centre, the degree is designed to prepare the next generation of researchers to use the technology. Applicants must have a good honours degree and an ability to program computers. Enquiries should be sent to programme director Bob Mann (e-mail rgm@roe.ac.uk). The first

12–15 students will start in September.

● www.nesc.ac.uk/career

Leicester women group together

Female scientists in Leicestershire will soon benefit from a range of new networking activities, thanks to a grant from the UK Resource Centre for Women in Science Engineering Technology and the Built Environment (UKRC). The grant will allow the university’s Centre for Interdisciplinary Science to organize monthly lunchtime lectures, an annual careers event, and a “big sisters” scheme, in which third- and fourth-year undergraduates will guide first- and second-year students through the start of their degrees. The Bradford-based UKRC, which opened last autumn, aims to encourage more women to study science by providing information and advice to employers, professional bodies and universities. The centre was formed in response to a government White Paper on women in science published in 2003.

● www.setwomenresource.org.uk