

Australian Academy of Science fellow

Eighteen of Australia's leading scientists were recently honoured by election to the Australian Academy of Science, see <http://www.science.org.au/academy/fellows/2006.htm>. Among the new fellows is AustMS member Igor Shparlinski.



Igor Shparlinski works as an Associate Professor at the Department of Computing, Macquarie University. His speciality is number theory. Igor Shparlinski has solved several well-known problems including an Erdős problem, which had remained unsolved for decades. He applied advanced methods of analytical number theory to computer science and cryptography, leading to a series of remarkable results, notably a recent rigorously proved attack on the Digital Signature Algorithm, and establishing the bit security of the Diffie-Hellman protocol.

ARC Federation Fellows

The following scientists have received an ARC Federation Fellowship in 2006 for their work in mathematics:

- Professor Peter Hall: Nonparametric statistical methods - new directions, theory and applications. Current institution: The Australian National University. Host institution: The University of Melbourne. Primary research field: Statistics.
- Professor David Karoly: Improving understanding of climate change and its impacts in Australia. Current institution: University of Oklahoma. Host institution: The University of Melbourne. Primary research field: Atmospheric sciences.
- Professor Hugh Possingham: Theory for global biodiversity conservation. Current institution: The University of Queensland. Host institution: The University of Queensland. Primary research field: Environmental sciences.
- Professor Pascal Van Hentenryck: Adaptive and integrated resource allocation. Current institution: Brown University. Host institution: Monash University. Primary research field: Mathematics.
- Professor Guifré Vidal: Quantum information and entanglement: A new framework for science and technology with quantum many-body systems. Current institution: The University of Queensland. Host institution: The University of Queensland. Primary research field: Information, computing and communication sciences.

For the complete list of ARC Federation Fellows, visit http://www.arc.gov.au/info_users/fedfellows_media_att_06.htm.