

Australian Academy of Science fellows

Twenty of Australia's leading scientists were honoured on 25 March by election to the Australian Academy of Science, see <http://www.science.org.au/academy/fellows/2004.htm>. Among the new fellows are mathematicians Robert Bartnik (University of Canberra) and Peter Forrester (University of Melbourne). In the next pages they will describe some of their research interests.



Following undergraduate and master's studies at the University of Melbourne, Robert Bartnik received his PhD from Princeton University in 1983. Post-doctoral positions at New York University and Stanford University followed before he returned to Australia in 1985. Since then he has held positions at the Australian National University, University of New South Wales, University of New England and University of Canberra as well as visiting positions in Hong Kong, Taiwan, Austria, Germany, the United States and France. He is perhaps best known for his work with John McKinnon on particle-like solutions of the Einstein Yang-Mills equation, but he has worked widely on applications of geometry and analysis to the study of spacetime structure.



Peter Forrester is a mathematical physicist specialising in random matrix theory and probabilistic combinatorial models. He completed his MSc at the University of Melbourne in 1982, and his PhD at the Australian National University in 1985, under the supervision of Professors E.R. Smith and R.J. Baxter respectively. He did postdoctoral research at the C.N. Yang Institute for Theoretical Physics, Stony Brook, USA, until 1987, and then returned to Australia to take up a lecturing position at La Trobe University. In 1993 he was awarded the Medal of the Australian Mathematical Society, and was also granted the first of three successive ARC research fellowships, all of which have been taken up at the University of Melbourne. His research has found application in the study of the Riemann hypothesis from prime number theory, which is regarded as the most outstanding problem in mathematics today.