

## Parabola Volume 42, Issue 2 (2006)

Dear Readers,

As we go to press, media around the world have been reporting the latest round of awards of the coveted Fields Medal (popularly called the 'Nobel Prize for Mathematics') which are awarded every four years. This year for the first time, an Australian mathematician Professor Terence Tao was honoured. Terence Tao has been renowned for many years for outstanding prodigious accomplishments including: winning three medals at International Mathematical Olympiads at high school when he was more than five years younger than most other competitors; completing a Bachelor of Science degree with First Class Honours, followed by a Master of Science degree in Mathematics while still a teenager; completing a Doctor of Philosophy at Princeton University followed by appointment to full Professor at the University of California, Los Angeles, at just 24 years of age.

Professor Tao received the Fields Medal for outstanding contributions across many areas of mathematics including, partial differential equations, combinatorics, harmonic analysis and additive number theory. Professor Tao was mentored by Professor Garth Gaudry at Flinders University, Adelaide, from age 12 through to age 17 when he completed his Masters in Mathematics under Professor Gaudry's guidance. Professor Tao still maintains his connections with colleagues in Australia. He visited Professor Gaudry and others during a six-month visit to the University of New South Wales in Sydney in 2000 and he was kind enough to write an article for *Parabola* (Vol 36, No 3). You can read more about Professor Tao by visiting the Australian Mathematical Society link at

<http://www.austms.org.au/Publ/Gazette/2006/Jul06/Supplement/>

Around the same time that I learned the news about the Fields Medal Award to Professor Tao, I was contacted by one of our readers and contributors, Ananda Kumar from Bihar in India, letting me know of a good news article about his school. Ananda and one of his colleagues, Abhayanand, set up a school in Patna, Bihar in 2003 for talented mathematics students from underprivileged communities. They named the school the Ramanujan School of Mathematics after the famous self-taught Indian mathematical genius of that name. Each year Ananda and Abhayanand train 30 students from very poor backgrounds so that they can attempt the Indian Institute of Technology (IIT) entrance exam. This highly competitive six-hour test is used to select 5,000 students out of 230,000 for a place in the IIT. The good news story in *Business Week Online*, August 21, 2006 reports that out of the "Super 30" trained by Anand and Abhayanand, 16 gained admission to the IIT in the first year and 22 got in in the second. The full article, which is inspirational reading, is at

[www.businessweek.com/stories/2006-08-20/an-awakening-in-bihar](http://www.businessweek.com/stories/2006-08-20/an-awakening-in-bihar)

In addition to the mathematics articles and the problems section, this issue of *Parabola* celebrates the accomplishments of talented mathematics students in the 2006 UNSW School Mathematics Competition. The problems and solutions are shown, as is the complete list of prize winners. Special congratulations to Graham Robert White (First Prize Senior Division) from James Ruse Agricultural High School and Max Cedric

Menzies (First prize Junior Division) from Sydney Grammar School. Also worthy of special commendation in this issue is one of our readers Ildar Gaisan, Year 11, All Saints Anglican School for providing solutions to the *Parabola* Problems.

B.I. Henry  
Editor