

Passing the torch...



Although not everyone will be familiar with the Aventis Prizes for Science Books, many will have heard of previous winning titles, such as *A Short History of Nearly Everything* by Bill Bryson and *The Universe in a Nutshell* by Stephen Hawking. And it's that time of year again. On 16 May, the Royal Society, which administers the prize for the Aventis Foundation, will host a dinner in London, and announce the 2006 winners. Two prizes are up for grabs: the General prize, and the Junior prize for books aimed at — and, once a shortlist has been compiled by adults, judged by — children below the age of 14.

Since their inception in 1988, these prizes have become the most prestigious book prizes for science books written for a general audience. In addition to the winner's purse of £10,000, and £1,000 for each short-listed author (there are normally six), authors can expect a surge in book sales. Last year's winner, *Critical Mass* by Philip Ball (pictured), registered a seven-fold increase in sales one month after the announcement. Not bad for a dark horse, with odds of 6/1 at bookmaker William Hill. Ball won over the judges by his "completely unpretentious" style in combining modern physics with social science. According to *Vanity Fair*, he makes "physics sexy again".

The 2006 longlist for the General prize contains 13 books — the extra entry this year is a reflection of the high quality of the submissions, the judges say. Several physics books have made it further onto the shortlist. In *Electric Universe*, David Bodanis weaves a tale of electrical discoveries and inventions and the people behind them, for example, how Alexander Graham Bell, in love with his profoundly deaf student, sought to win approval of her family by the successful implementation of the telegraph.

Switching gears to cosmology, *Parallel Worlds* explores the possibility of humanity escaping certain doom billions of years from now when the sun goes through its red-giant phase and dwindles into dwarfdom. How? String theory! Using astronomical data and

elementary physics, author Michio Kaku considers the latest cosmological models, in which parallel universes and other dimensions exist.

Arthur I. Miller takes a more biographical approach in *Empire of the Stars*. The story of Subrahmanyan Chandrasekhar (Chandra) is also the story of black holes. And black holes were not always part of the daily lexicon. In 1935, Chandra presented to the Royal Astronomical Society his conclusion that gravity will crush stars with masses above some threshold value to a singularity of infinite density. He was torn to shreds by Sir Arthur Eddington, one of the most prominent astrophysicists at the time. This was all the more hurtful given that Eddington had made several visits to Chandra in the weeks leading up to the seminar, and was well aware of the latter's work. History would vindicate Chandra, and black holes are now acceptable in polite conversation.

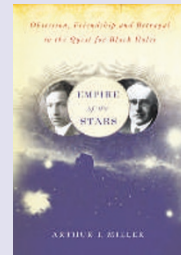
Two other books on the longlist are physics-related: *The Silicon Eye* by George Wilder and *The Fruits of War* by Michael White. They both deal with technology. In *The Silicon Eye*, the subtitle, *How a Silicon Valley Company Aims to Make All Current Computers, Cameras and Cell Phones Obsolete*, says it all. The company in question is Foveon, whose imaging technology may help intelligent machines 'see'. Or spy. The need to spy, particularly during wartime, has led to all sorts of scientific advances: radar, X-rays, satellites and so forth. *The Fruits of War* provides ample evidence for trouble and strife as being good for creativity and innovation.

All the books are about science, but the authors deal with universal themes such as betrayal, hope and joy of discovery. After all, scientists are people too. And any book that can make science not only palatable but exciting to the general public is already a winner.

May Chiao

May Chiao is an Associate Editor of *Nature Physics*.

On the shortlist



Empire of the Stars: Obsession, Friendship and Betrayal in the Quest for Black Holes by Arthur I. Miller
Little, Brown/Houghton Mifflin: 2005. 416 pp.
£16.99/\$26

At 19, Subrahmanyan Chandrasekhar proposed that stars collapsed to a singular point, and was later publicly ridiculed by Sir Arthur Eddington. It was an exciting time for astrophysics and quantum physics.



Parallel Worlds: The Science of Alternative Universes and our Future in the Cosmos by Michio Kaku
Allen Lane/Doubleday: 2005. 448 pp.
£20/\$27.95

If our universe is part of an infinite set of parallel universes, can we move between them, and possibly avoid (or postpone) our fate?