

## Physics in the Pub – Friday 15 October 7 pm at Ashfield Hotel

### Line up:

- Breakthrough Starshot is a plan to send a fleet of spacecraft to another star for the first time ever. **Alessandro Tunis (Sydney Uni)** will tell us how these tiny craft will surf to Alpha Centauri on a ground based laser beam.
- Seismology and archaeology sound like things you'd do in the ground - **Kirsten Banks (UNSW)** does them in the sky!
- Grab a glass of warm milk and a blankie - **Chris Ferrie (UTS)** is going to read us his best-selling book, *Quantum Physics for Babies*.
- **Rachel Rayner (CSIRO)** loves photons. No, really loves them. She's sharing a segment of her sell-out show from Adelaide Fringe on the electromagnetic spectrum. Yes, sell-out!
- Stars explode and make an amazing spectacle - but could they endanger the earth? Is that what caused the mass extinction around 400 million years ago, asks **Graeme Melville (UNSW)**?
- **Ian Bryce (AIP)** says it's very challenging and dangerous to fly a spy plane such as the U2. But we can't tell you how he knows...
- The X-Y enzyme process does ABC. Biologists discovered them in 19NN, but could only approximate the process, because the differential equations were too complex. But not for **Tony Dooley (UTS)** who's found an exact solution.
- **Boris Jovanovic (AIP, RAeS)** is going to take us gliding, a complex pursuit that relies on the physics of movements of invisible air, climatic variations in heat and moisture, and micro-climates created by tin roofs in the outback - surprisingly significant!
- Some people say physics is stuffed, but **Tibor Molnar (University of Sydney)** says no. He argues that stuff might not even exist!

MCed by **Dr Phil Dooley (Phil Up On Science)**