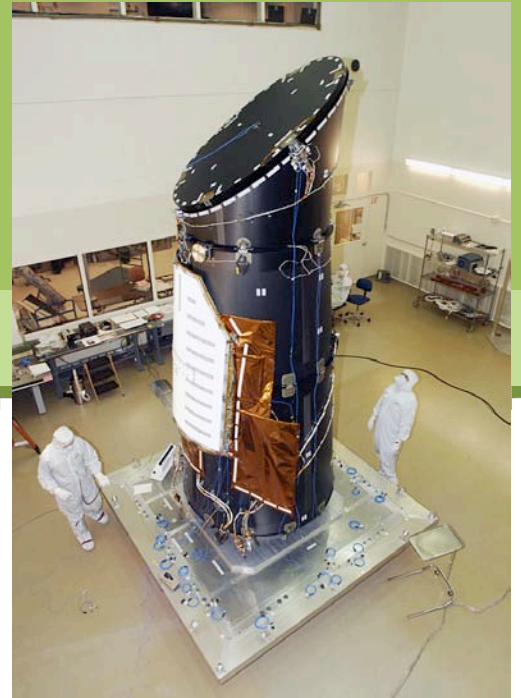




The University of Sydney
School of Physics

Alumni UPDATE

- First female radio astronomer
- Optus advises Space Scientists
- Award winning image



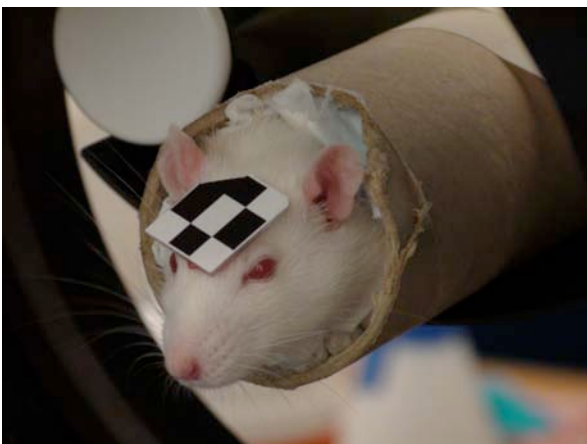
Dates to Remember

6-16 October School (NSW) Holiday Program will see Sydney University Museums hosting a range of fun, engaging and informative school activities for children from 5 years to 12 years. There are two sessions each day, 10am-12noon and 1pm-3pm. Cost for all sessions \$10 per child, call us on 02 9351 2812

31 October Faculty of Health Sciences based at The University of Sydney's Cumberland Campus, Lidcombe, is celebrating its 30th Birthday with a day of activities & Events. For more information or to register visit the website www.fhs.usyd.edu.au

Australian Space Science Conference

Optus recently advised an international who's who of space engineers, planetary scientists and space scientists on satellite engineering. Dr Gordon Pike heads the design, building, launch, and operation of Optus' satellites, including one just launched within the last eight weeks. A graduate in aeronautical engineering from The University of Sydney, Pike presented *Lessons From Optus On Designing, Building And Operating Satellites* as part of the ninth Australian Space Science Conference (ASSC), recently held at The School of Physics. With the Federal Government's commitment to make "space and astronomy" one of three research areas in the Super Science Initiative by creating the new \$40M Australian Space Research Program and \$9M Space Policy Unit, the 2009 ASSC has occurred in an historic year for Australian space research. "The ASSC is the primary annual meeting for Australian research relating to space science. It welcomes space scientists, engineers, educators, and workers in industry and government," says co-chair Professor Iver Cairns, who leads the Space and Solar Physics research group at the School of Physics and is part of the NASA team that launched the 2006 Stereo Spacecraft. (Cont. Page 2)



SAY CHEESE Congratulations to Professor Robert Fulton and his team for being awarded the Siemens High Performance Preclinical Image of the Year at the 2009 World Molecular Imaging Congress in Montreal. This award is for a 'cutting edge' development in small animal imaging technology. The School of Physics-administered ARC Discovery Grant is for the PET imaging of 'awake' rats (as recently described at a Research Bite). Fulton reports, "We have a nice trophy to put on display in our lab". Team members include: Victor Zhou, Andre Kym (Physics) Steve Meikle, Kata Popovic, Ingallil Karlsson, Mahmood Akhtar, Wencke Lehnert, Michael Kassiou. (BMRI).

Alumni UPDATE

UNDER THE RADAR: book launch



Ruby Payne-Scott (1912-1981) was a rather notable graduate of the School of Physics

as she went onto become the world's first female radio astronomer. She was an eminent Australian scientist who made major contributions to the WWII radar effort of the CSIR Division of Radiophysics from 1941 to 1945. In late 1945 she began pioneering radio astronomy efforts at Dover Heights in Sydney; she continued these groundbreaking activities until 1951.

As an example, it is likely that Payne-Scott carried out the first interferometry in radio astronomy at sunrise on 26 January 1946. The location was Dover Heights, using Australian Army radar as a radio telescope. It was at this time that she discovered Type I solar bursts.

A biography of her life entitled "Under The Radar: The First Female Radio Astronomer" will be launched on Wednesday 25 November in The Great Hall from 6pm. Co-author, Prof. Miller Goss and Payne-Scott's children, contemporary artist, Fiona Hall and mathematician, Professor Peter Hall, will talk about Under the Radar and life with Ruby. To book your place RSVP to Alison Muir on +61 2 9036 5194 or email: a.muir@physics.usyd.edu.au

Space Science Conference (cont.)

Senator Annette Hurley (Labor SA) who led the Senate inquiry, "Lost in Space", opened the one-day ASSC workshop looking at the first Decadal Plan for Australian Space Science on 30 September. Government and industry representatives participated in the workshop, which included a discussion of the Plan's prospective projects and proposals for the Australian Space Research Program. "This ASSC has been an excellent meeting," commented Professor Cairns.

The ASSC was jointly sponsored and organised by the National Committee for Space Science (NCSS) and the National Space Society of Australia (NSSA).

Speakers included: Professor Malcolm Walter, Director, Australian Centre for Astrobiology; Professor Charley Lineweaver, ANU expert on planetary science and whether our solar system is unusual; Professor Chris Rizos, expert in geodesy, GPS, and global navigation systems; Mr Rich Currier, Senior VP of Loral Communications, a major international spacecraft building firm who are looking to expand into the National Broadband network; Professor Brian Fraser, Principal Investigator on the magnetic field experiment on FedSat - Australia's second satellite; and Dr John Le Marshall, world-renowned Earth observing expert and expert in data assimilation.



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