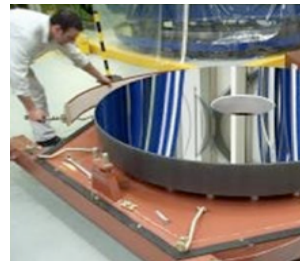
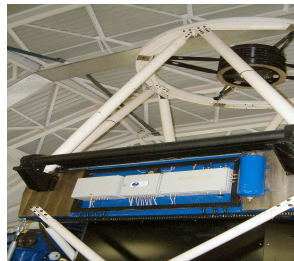
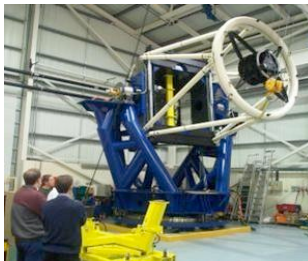


ARC Linkage SPACE TO GROW Project Newsletter Edition 1 – October 2009

Welcome to our first Space to Grow newsletter. Here you can discover how the team, partners and cohorts are working towards educational research to increase students' engagement with science through access to the robotically-controlled \$30million Faulkes Telescopes!

Features inside this issue include details of the Space to Grow websites, team presentations, Professional Development workshops and first projects.

We also welcome Robert Hollow, Education Officer with the CSIRO Australia Telescope National Facility to our team as a Consultant. His knowledge and expertise in Astronomy Education is a valuable addition to the team and our project aims.



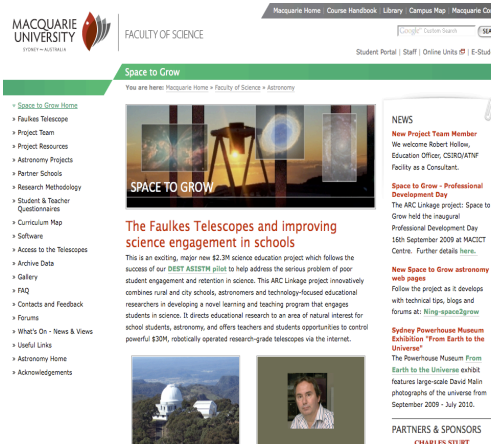
Images: Faulkes Telescope during manufacture (1 and 2), Faulkes Telescope Mirror, Siding Spring Observatory Open Day taken by Quentin Parker

As Project Manager for this exciting initiative, I welcome your contributions of news of your projects with your challenges and successes, pictures, comments or queries to be included in the next Newsletter edition or on our website. So please contact me by email, phone or Skype.

Newsletters will also be posted on both websites - happy reading!

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Space to Grow Websites



The <http://www.astronomy.mq.edu.au/space2grow> website is being continually updated across all topics with additional information and pictures. Updates are being made to existing astronomy projects, the curriculum map is underway and there are plans for an Aboriginal astronomy project to be released in the near future. Refer to this site for astronomy and science related links and stay updated through News items and Newsletters.



The Ning <http://space2grow.ning.com> social networking site was developed by Kali Madden for cross-pollination of ideas between science educators implementing the project and team members. New members are invited to join – email Carolyn Dow for an invitation if you are not already a member... then check out which members are SciFi fans, which are animal lovers and who used the mosaic astronomy image from the Workshop Day to update their profile!

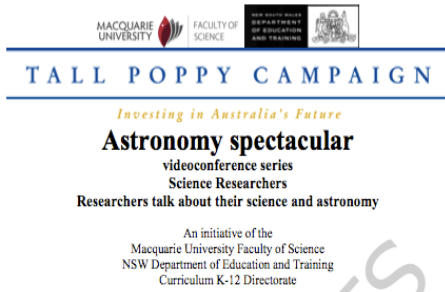
Project Presentations



A very successful presentation by Chief Investigator, A/Prof. Quentin Parker to the science coordinators of the *Catholic Education Office Parramatta* was held at the Aengus Kavanagh Education and Equity Centre, Mt Druit on 2nd September 2009. The audience of 28, including 2 school principals and 1 deputy principal, left the presentation committed and ready to commence the program in Term 4! Also presenting on the day was Dr David Frew, who briefly demonstrated the current version of a software project entitled 'Making Colour Images with IRIS' and explained the method of collecting online teacher feedback.

Teacher registration numbers for the Professional Development workshop were high as a result of the excitement for the project generated on the day.

Project Presentations (contd.)



Dr David Frew gave a presentation to the Tall Poppy Campaign Astronomy Spectacular Video conference with *New South Wales Department of Education and Training*, 25th August 2009 for the Space to Grow project, together with other Macquarie University Astronomy faculty members in their field of expertise.



Chief Investigator, A/Prof. David McKinnon took the opportunity to speak with our partners at LCOGT.net in Santa Barbara USA and meet up with Wayne Rosing in early October 2009. The LCOGT.net is a private operating foundation building a global network of telescopes for scientific research and research-based education.

David's presentation of the project and progress thus far was very well received and then rewarded with a tour of new telescopes being built for [LCOGT](http://LCOGT.net) network.

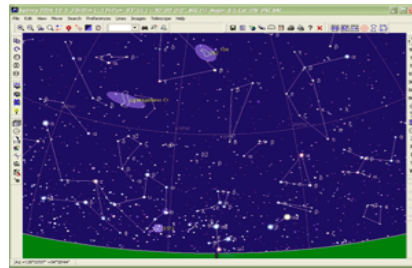
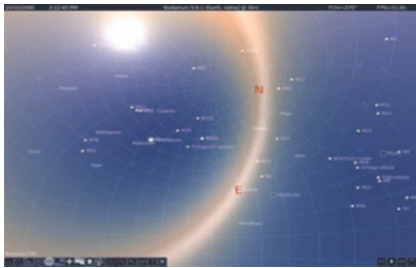
See page 4 for some astronomical images taken on the Faulkes Telescopes.



Images taken by David McKinnon: 40cm telescope, small clamshell roof, 1 metre telescope

Professional Development (Training) Workshops

The inaugural Professional Development workshop on 16th September 2009 in the MACICT centre involved most of the team members. Educators attended from DET Western, DET North Sydney and the Catholic Education Office Parramatta, as well as Caroline Taouk (Science Liaison Officer at Macquarie University). Modules covered the aims, history, navigations of websites, projects, software, planning and scheduling aspects via presentations and ‘hands-on’ training.



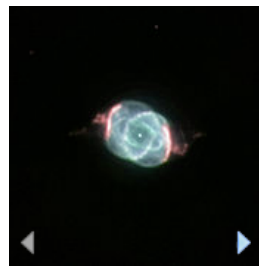
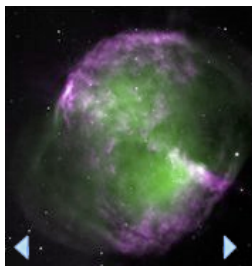
Screen grabs of software programs Stellarium and Cartes du Ciel

Interest in the workshop was so keen it was difficult to drag people from their desk to eat lunch! The questions raised by the floor allowed all participants to clarify information and feedback was very positive overall. Photos taken on the day can be viewed on the website*.

The next workshop will be held at CSU Bathurst 6th November 2009. Participants from *DET Western Region, E2 Orange and Catholic Education Office Bathurst* will be in attendance. Refer to the website* for further details.

First Project Implementation

Raquel Sheehy, Head Teacher, Science at *Terra Sancta College, CEO Parramatta Diocese*, attended the workshop and has led the way implementing the project. We look forward to her reports on the students’ achievements.



Faulkes Images: M27 Dumbbell Nebula and NGC6543, courtesy [LCOGT.net](http://lcogt.net) partners <http://lcogt.net>

* <http://www.astronomy.mq.edu.au/space2grow> <http://space2grow.ning.com>