

Let's Talk About Imaging

Astroimagers from around Australia gathered for three wonderful days of talks on improving your shots.



Attendees at the 2011 FLI Australian Astro Imaging Conference. ALL IMAGES COURTESY CHRIS MALIKOFF

The Crowne Plaza Hotel in Surfers Paradise was the venue for the inaugural Finger Lakes Instrumentation Australian Astro Imaging Conference held on 8 – 10 July 2011. The event was a first of its kind locally, bringing together imagers of all levels from all states of Australia and New Zealand with the theme of knowledge dissemination for all levels of imagers.

The major sponsor, Finger Lakes Instrumentation, manufacturers of some of the world's finest CCD cameras, was represented by their General Manager, Greg Terrance, who arrived at the Gold Coast after a four leg flight from New York and impressed everyone with both his personal and professional manner. His presentation displayed the diverse uses of their cameras and the amazing quality achieved by imagers from around the world using FLI products.

Gold level sponsors included Sirius Observatories, Griffith University, and



MARK BOLTON

// The presentation topics covered ... equipment selection, image acquisition, and processing techniques. //

Australian Sky and Telescope, while The Binocular & Telescope Shop also showed great support as a silver level sponsor. An associate sponsorship category was also included with Sirius Optics, Star Optics, Global Rent A Scope, Startools, Pixinsight, and Engineers Australia providing either support or prizes to be given to attendees at the closing ceremony. As the Conference Chair, I would like to thank all sponsors for their participation and support as the conference would not have gone ahead without them.

The keynote presentation was delivered by Professor David Malin on the Saturday morning with a talk entitled "From the Microscope to the Telescope", highlighting his career and

techniques he developed for image capture and processing. His closing comments stressed the point to all imagers to *respect the light, every photon counts*, which has become a catch cry amongst attendees. Malin also assisted with an extra presentation at the end of the conference, filling a spot due to illness. His talk, entitled "The Colours of the Night Sky", was greatly appreciated by the organisers and attendees alike.

The conference was also fortunate to be supported by two visiting international astrophotographers, Ken Crawford and Rogelio Bernal Andreo. Both these gentlemen won a lot of Australian friends during their visit, thanks to their friendly, affable natures and their willingness to discuss and

educate attendees on the finer points of their world class image capture and processing techniques.

Ken Crawford delivered a workshop on the Friday of the conference entitled "Digging Out the Detail", explain his processing techniques in understandable terms to all attendees. He also provided as a gift to all attendees, his latest video tutorials, which were provided in the data DVD supplied to everyone after the conference. Ken spent a solid week recording and editing these tutorials for the conference, and it was greatly appreciated by everyone involved.

Ken also gave a presentation on his collaborative research with David Martinez-Delgado on "Stellar Tidal Streams in Spiral Galaxies of the Local Volume". This work was intended as a pilot survey with modest aperture telescopes and is currently producing publications in scientific journals as prestigious as the *Astrophysics Journal*. This work caught the interest of several imagers at the conference and there are searches going on at the moment for suitable cameras and equipment to allow some Australian imagers to also participate.

Rogelio Bernal Andreo is one of the few imagers whose distinctive imaging and processing style make his work instantly recognisable. He has taken wide field imaging to new levels by taking a fresh look at this style of imaging and putting his own unique stamp upon it. Rogelio took all attendees through a processing



Greg Terrance (Finger Lakes Instrumentation) addresses the Conference.

example of a section of Barnard's Loop during a workshop on the Friday of the conference using his software of choice, *Pixinsight*. During the workshop, the image was seen to develop with the Andreo stamp firmly upon it.

Rogelio's second presentation, on the Sunday, was entitled "Wide Field Imaging" where he presented his capture and processing techniques as well as the philosophy behind his imaging style. He pointed out that his images are intended only to be

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Attendees at the conference have an impromptu discussion about imaging hardware.



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aesthetically appealing 'pretty' pictures of the night sky, however if they cause one child to look up and wonder and that child goes on to become a professional astronomer, then his images have achieved their aim.

The presenters' list of local astrophotographers read like a who's who of Australian imaging, including Mike Sidonio, Jason Jennings, and Eddie Trimarchi to name a few. Space constraints prohibit me from providing a full list of presenters and topics; however I encourage the reader to visit www.aaic2011.com, where the full list can be seen as well as more conference photos.

The presentation topics covered a wide range of subjects and levels, from equipment selection, image acquisition, to processing techniques. Presentations were also given on scientific applications of astro imaging, including the Backyard Observatory Supernova Search team (see page 26) and their amateur / professional collaboration, as well as a presentation on the manufacture and operation of

a cost effective spectrograph by Julian West, which won excellent praise from David Malin.

The finalists of the inaugural FLI AAIC Award for Outstanding Achievement 2010 / 11 were Steve Craft (M8 image), Greg Bradley (Horsehead Region Mosaic), Trent McDougall (Moondance - Clear Sky Detection System), and a collaboration between Phil Hart and Fred Vanderhaven on animation capture and hardware.

The award was judged by the visiting international imagers with Phil Hart and Fred Vanderhaven being awarded the cheque and certificate. Audience feedback judged the award for best presentation, which went to Terry Cuttle for an excellent presentation on total solar eclipse imaging and the Chairman's Choice Award was given to Julian West for his presentation on amateur spectroscopy.


The conference was hailed by all that attended as a great success and it achieved the aim of information dissemination that will lead to improvement in the techniques of all



Ken Crawford, who presented at the conference, is currently the President of the Advanced Imaging Conference, held annually in the United States.

attendees. Thanks also go to Chris Malikoff for his tireless work in preparation of the conference logo, web page, and conference booklet, as well as, in conjunction with Humayan Qureshi, the photos shown here and on the web page. We can now look forward to the next conference to be held in mid 2013 at a city hopefully near you. ♦


Mark Bolton, the Conference Chair of the 2011 Astro Imaging Conference, is a Lecturer at the Griffith School of Engineering.




Astronomical Association Queensland

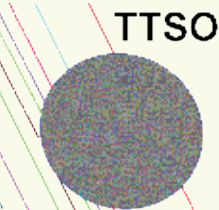
NATIONAL AUSTRALIAN CONVENTION OF AMATEUR ASTRONOMERS

April 6-9, 2012





The 25th NACAA will be held over Easter 2012, from Friday April 6 until Monday April 9 and is hosted by the Astronomical Association of Queensland with support from all other astronomy clubs in South East Queensland. NACAA will take place in the historic Grand Court of the University of Queensland at St Lucia in Brisbane. The NACAA XXV committees invite all amateur astronomers to attend this rich and varied feast of astronomical excellence!



TTSO

With the North Queensland eclipse of the Sun in Nov 2012, come along for the special Eclipse Astrophotography Workshop. NACAA will also host the Variable Stars South Symposium (VSSS) on April 6 with the Trans-Tasman Symposium on Occultations (TTSO6) on April 9.

So there is lots to do! Registrations are now open

<http://www.nacaa.org.au/2012/about>

Hear talks about:

- variable stars, and supernovae
- astroimaging and processing
- education, outreach, local activities and events
- telescope making and instrumentation
- comets, eclipses, and occultations
- pro-am collaboration
- astronomical history
- double stars

and much more!

