

# THE UNIVERSE

Yours to discover



Astrophotography exhibition curated by  
Dr John Goldsmith [www.celestialvisions.com.au](http://www.celestialvisions.com.au)

**"The Universe. Yours to discover"** is a collaborative astrophotography exhibition featuring works by Western Australia's talented astrophotography community, including James Athanasou, Mark Bridger, Dr John Goldsmith, Colin Jenkinson, Trevor Lundstrom, Brendan Mitchell, Carol Redford, Paul Sartory, Brett Turner & William Vrbasso.

Saturday 21<sup>st</sup> and Sunday 22<sup>nd</sup> September 2019,  
Mount Magnet Astro Rocks Festival, ANZAC Hall, Mount Magnet.



*Upper Photo: Dr John Goldsmith  
Lower Photo: Mark Bridger*

# ASTROPHOTOGRAPHY EXHIBITION

The night sky provides an enormous richness for humanity. The cosmos provides a source of wonder, mystery and enormous opportunities for exploration, discovery, revelation, personal experience and enjoyment. Astrophotographers contribute to this by seeking to visually document the cosmos, in moments of time, often recording unique images. They become a witness to the majesty and wonder of the cosmos, and through the visual image, are then able to share their passion and insights to the broader community, many of whom rarely get the opportunity to experience the cosmos for themselves.

By exhibiting astrophotography, our community is encouraged to appreciate the night sky and the dedicated and talented astrophotographers. They have developed their skills and knowledge over years, using specialised astrophotography and telescope equipment, employing special image processing techniques to detect and reveal faint detail. The result is a unique series of astro-images that encompass virtually all aspects of astro-imaging, from deep space, through to high resolution planetary and lunar imaging, high resolution and narrow band imaging of the Sun, documentary style imaging of astronomical events such as solar and lunar eclipses, comets, meteor showers, widefield images of the Milky Way, photomosaic images of the cosmos in extraordinary detail and resolution, wide angle astro-landscape photography, 360° imaging and timelapse astrophotography.

“The Universe. Yours to discover” is a collaborative exhibition featuring the work of ten astrophotographers, revealing the beauty, wonder and splendour of the night sky. The curated collection includes Western Australian, Australian and international locations. Images of beauty, wonder and awe, of stunning moments in time, in ancient landscapes, recorded for all to experience and presented here for all to enjoy and appreciate.

The Universe is yours to discover!

**Framed exhibition prints (glass fronted), astro greeting cards and Volume 1 and 2 of “The Universe. Yours to discover” exhibition books are available for purchase.** Contact the curator, Dr John Goldsmith, mobile 04 399 04 536, email [John.Goldsmith.MSc@gmail.com](mailto:John.Goldsmith.MSc@gmail.com) / [www.celestialvisions.com.au](http://www.celestialvisions.com.au)

Astrophotography books: Online videos at [vimeo.com/123163348](https://vimeo.com/123163348) and [vimeo.com/323429302](https://vimeo.com/323429302)



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**Listing of Exhibition Works**  
**Presented 21 – 22 September 2019,**  
**ANZAC Hall, Mount Magnet, Western Australia.**

Comet Hale-Bopp & Cheops, the Great Pyramid	Dr John Goldsmith
NGC 6188 – The Fighting Dragons	Brendan Mitchell
Eclipse Ellipse	Dr John Goldsmith
Total Solar Eclipse	Carol Redford
Uluru Milky Way	Dr John Goldsmith
Trio of planets	Brett Turner
Golden desert Pyramids & star trails	Dr John Goldsmith
Southern Pinwheel Galaxy M83	Brett Turner
Comet Hale-Bopp and Stonehenge	Dr John Goldsmith
Rosette Nebula	Mark Bridger
Comet Hale-Bopp & the Mosque of Sultan Hassan, Cairo	Dr John Goldsmith
Rosette Nebula	Paul Sartory
Comet Hale-Bopp	Dr John Goldsmith
Annular Eclipse	James Athanasou
Annular solar eclipse multiple exposure image	Dr John Goldsmith
Pyramids of Giza Twilight & Comet Hale-Bopp	Dr John Goldsmith
Antarctica base Aurora	Colin Jenkinson
Comet McNaught above Perth	Dr John Goldsmith
Karijini Milky Way	Trevor Lundstrom
Comet Hyakutake's close approach to the Earth	Dr John Goldsmith
Comet Lovejoy	James Athanasou
At one with the Universe	William Vrbasso

## About the contributing astrophotographers

**James Athanasou** began astrophotography in 1979 in his backyard in Perth, taking constellation shots with a Canon SLR camera. In 1986, he photographed Comet Halley from Mt Magnet, using a motor controller he built for guided photos on a Meade tracking mount. In 2010, James accompanied John Goldsmith during Goldsmith's 2010 PhD fieldwork to Wolfe Creek Crater (East Kimberley) as a Gingin Observatory representative. James accomplished new timelapse and astrophotography at the crater. His memberships include five years with the Astronomical Society of Western Australia (ASWA), the Astronomy Group of Western Australia (since inception), Gingin Observatory (five years), Astronomical Society of the South West (four years) and the Murdoch Astronomical Society (five years). His photographs have been published in *Sky & Telescope*, a book called "Drawn to Mt Magnet", and the West Australian newspaper.

**Mark Bridger** started in astrophotography in 2012. Mark is an engineering supervisor with the Perth Mint. He is an Australian citizen, originally from the United Kingdom and presently lives in Quinns Rock, Western Australia. His astrophotography is done from his backyard where he uses two Skywatcher refractors (80mm and a 120mm), a 60mm Takahashi, a 10 inch carbon fibre Newtonian and an 8 inch Schmidt Cassegrain telescope. He uses an SBIG ST8300 camera, a DMK21 monochromatic camera and two Canon DSLR cameras (EOS 60Da and an EOS 550D).

**Dr John Goldsmith** is an astrophotographer, writer, researcher, exhibition developer and curator based in Western Australia. His life-long fascination with the cosmos has found expression through his photography, exhibitions, writings and research. His PhD research "Cosmos, Culture and Landscape", at the International Centre for Radio Astronomy Research, Curtin University, focussed on cultural astronomy and the documentation, communication and sharing of Aboriginal sky knowledge, associated with Wolfe Creek Crater and radio astronomy initiatives in the Murchison region of Western Australia. His research applied a suite of digital imaging for site documentation, including astronomical timelapse and 360° spherical imaging. Dr Goldsmith is a member of The World at Night ([www.twanight.org](http://www.twanight.org)), a leading global network of astronomical landscape photographers. He is the creative developer behind Celestial Visions ([www.celestialvisions.com.au](http://www.celestialvisions.com.au)) and his astro-imaging is exhibited worldwide. He served as the curator for the Astrofest astrophotography exhibition, from 2009 to 2019. In 2011, John was awarded the inaugural De Laeter Science Engagement Scholarship, (Gravity Discovery Centre, Western Australia). In 2017, John featured in "The Borderless Sky, The Aboriginal Sky of Australia" episode, screened in Europe via ARTE.

**Colin Jenkinson** is kept busy with a young family of three children. His work activities have seen him on several working sessions in Antarctica, at McMurdo station. In 2006, whilst based at McMurdo Station, Colin experienced the Southern Lights, during the long polar winter, when the sea ice was solid and with dark winter skies. It was during this time that Colin achieved astrophotography of the Southern Lights, earning the accomplishment of the most southern based astrophotographer featured in *The Universe. Yours to discover* exhibition. When based in Antarctica during the summer season, no night astrophotography was possible, because it was continuous daylight!

**Trevor Lundstrom** is a Western Australian based photographer who's talents include landscape, wilderness and astrophotography. He describes his style simple, strong, colourful and yet an accurate record of what he has seen. He sees small details, patterns and subtleties along with the grandness of situations and aims to capture the story being told with his photographs.

**Brendan Mitchell** grew up on cattle stations in the Northern Territory, before moving to Western Australia. His experiences in the Northern Territory led to a growing appreciation of the night sky and this developed into a love of astrophotography. Brendan operates Astronomy Academy, a successful business based on the teaching of deep sky astrophotography and related services and products. He hosts a lively astrophotography discussion group <https://www.facebook.com/groups/astronomyacademydiscussion>. The Astronomy Academy meets on a monthly basis, providing an accelerated learning environment for deep

sky astrophotography. Brendan holds a Civil and Construction Engineering degree specialising in Structural Design from Curtin University with his primary experience in mid to high rise buildings.

**Carol Redford** (aka "Galaxy Girl") is an accidental stargazer! Carol's passion for astronomy and stargazing was ignited during the years she owned Gingin Observatory (2007 – 2012). In 2013, Carol established the Stargazers Club WA ([www.stargazersclubwa.com.au](http://www.stargazersclubwa.com.au)) where she and her team introduce beginners of all ages to the world of astronomy, telescopes, stargazing and astrophotography. Carol is Co-Chair of *Astronomy WA*, Western Australia's astronomy and space science community & network. Carol is also a member of the International Dark-Sky Association. She now combines her passion and marketing qualifications to develop an Astro-tourism industry across regional Western Australia ([www.astrotourismwa.com.au](http://www.astrotourismwa.com.au)), where the State's dark night sky asset will be protected from light pollution and shared with visitors from around the world.

**Paul Sartory** Born in 1954 in the UK, Paul's interest in astronomy was inspired by his father who was a keen telescope maker and lunar observer in the 60's and 70's and a friend of the late Sir Patrick Moore to whom he donated several of his telescopes. After many years of manually guided film emulsion astrophotography under the less than ideal British night skies Paul's career in the oil and gas industry took him away from the UK and left him little time to continue his passion. Eventually in 2001 Paul found himself working in Perth in Western Australia. Here were the dark skies that he had only dreamed of and with the complete transformation of astrophotography with the introduction of CCD's Paul devoted himself to mastering the new technology and capturing the glories of the night sky. Retiring in 2011 Paul observes and photographs the night sky from his backyard in Swan Valley North of Perth using both refractors and Schmidt-Cassegrain reflectors and photographs the sun using a Narrow Band Hydrogen-alpha telescope. His endeavours have been rewarded with awards at the CWAS "David Malin Awards" and the annual WA Astrofest Astrophotography Competition.

**Brett Turner** is a retired electronics engineer whose interest in astronomy started with the race to the Moon, during the 1960's. Brett's first astro-photo was taken of Mars during the 1988 Martian opposition using the Perth Observatory's C14 telescope, where he successfully recorded an orange blob. Over the next few years he focussed on deep sky astrophotography with the Perth Observatory's 16 inch University telescope, and he authored a number of articles in the Southern Astronomy magazine. Brett currently concentrates on planetary and deep sky photography at his own observatory located near Dardanup in the south-west of Western Australia.

**William Vrbasso** is a control systems engineer living in Perth, Western Australia. He is a self-taught amateur astro-photographer dedicated to advancing his skill in night landscape photography through camera lenses, as well as deep sky photography through telescopes. Will often seeks the solitude of remote areas of the country where the night skies are made more profoundly beautiful with the absence of modern civilisation. Through passion, perseverance and experimentation, Will has been successful in winning the Best Astrophoto Award in Astrofest 2017, multiple commendations in Astrofest and Australian Photography Magazine competitions, and has been featured in NASA's APOD, Australian Sky and Telescope, and amateur astrophotography magazines. His images feature online at [www.stellaraustralis.com](http://www.stellaraustralis.com)

### **Thankyou !**

Thank you to our sponsors and supporters including the Shire of Mount Magnet, the Mount Magnet Astro Rocks organising committee, staff and volunteers, and the photographers featured in the exhibition, including James Athanasou, Mark Bridger, Dr John Goldsmith, Colin Jenkinson, Trevor Lundstrom, Brendan Mitchell, Carol Redford, Paul Sartory & Brett Turner & William Vrbasso.

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# Astrophotography workshop & field visit to “The Amphitheatre”, Mount Magnet.

Hosted by Dr John Goldsmith / [www.celestialvisions.com.au](http://www.celestialvisions.com.au)

Mount Magnet Astro Rocks Festival, 21 - 22 September 2019

**Astro-landscape photography workshop at ANZAC Hall, 3 - 4pm  
& evening field trip, 5 - 9pm, at “The Amphitheatre”, Mount Magnet.**

On Sunday 22 September 2019, a one-hour introductory astro-landscape photography workshop was hosted by Dr John Goldsmith. Attended by approximately 15 participants, the fundamentals of astrophotography were taught, including camera equipment, manual control of cameras, lenses, tripods and related subjects such as trip planning and field visit safety. The field visit took place on the Sunday evening 22 September 2019, at the nearby Mount Magnet location of “The Amphitheatre”.

**The Amphitheatre** is an ancient laterite rock formation, accessed via the Boogardie-Lennonville road, north of Mount Magnet. This popular picnicking site provides an excellent location for landscape astrophotography. Participants used their own camera gear for a practical field session of night photography. Participants were prepared for cold conditions, but the night was milder than expected. The superb sky conditions provided an ideal opportunity for astrophotography. Participants ranged from beginners, people with a couple of years of general photography experience, all the way through to people with several years of astrophotography experience. One memorable experience during the field visit occurred when assistance was provided to one participant who improvised a shutter release device, using a lucky band and a popsicle stick (!) with superb photographic results being achieved! The field astrophotography session concluded at 9pm.

## ***Some participant feedback:***

*“The support, education and knowledge I received in such a short time has given me the tools I need to take the next step to enjoy my astrophotography further. Thank you for a wonderful workshop”.*

*“It was a fantastic night at Mt Magnet and I look forward to seeing the report on the website. Thank you so much from a very happy novice photographer. Thank you for your creation of popsicle stick shutter”.*



Photo © Dr John Goldsmith



Upper panoramic mosaic photo © Dr John Goldsmith  
Lower photo © Barbara Sutherland



Photo © Barbara Sutherland

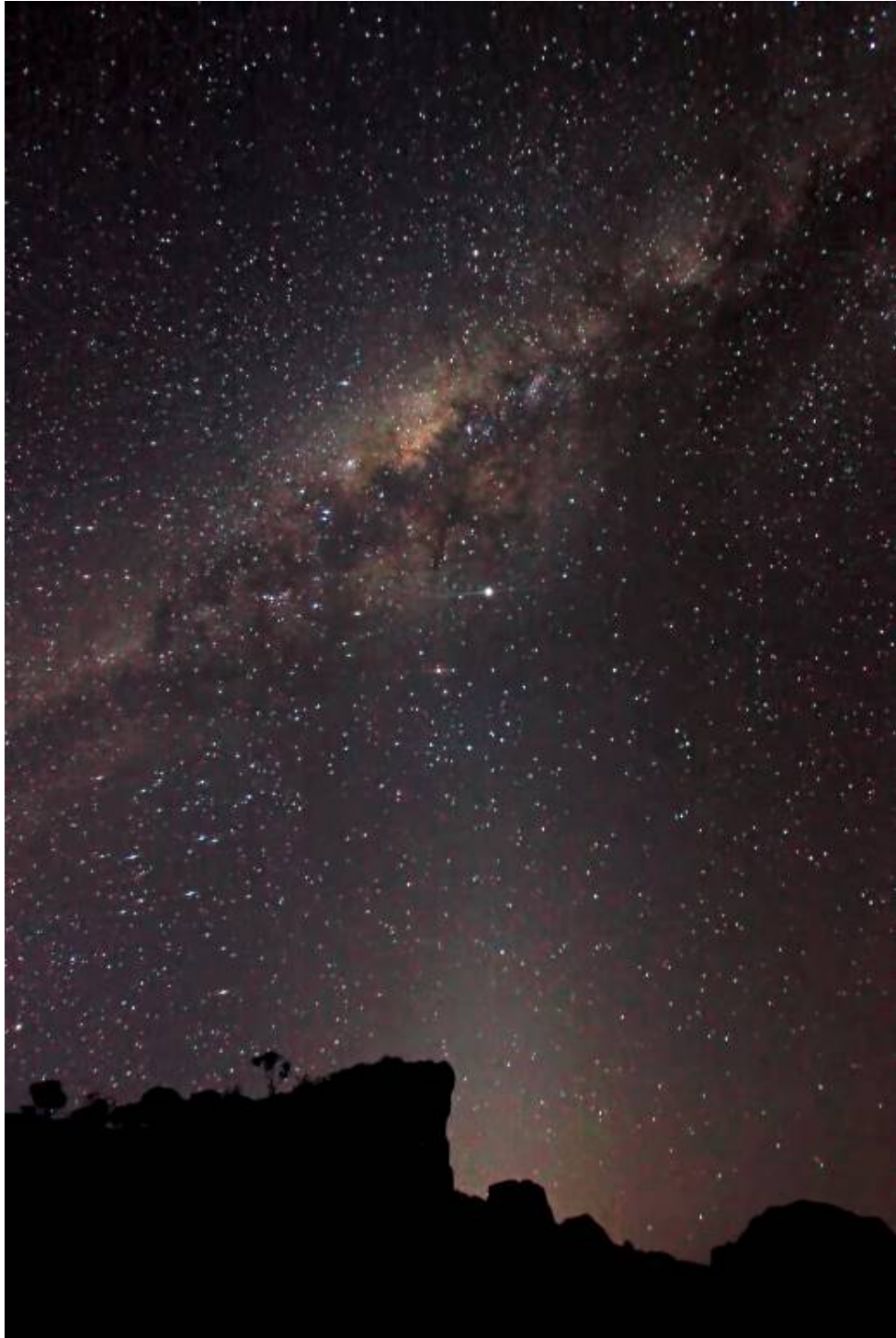


Photo © Kristine Davis

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