The 2014 Astrofest Astrophotography Exhibition, presented at Western Australia’s biggest annual astronomy festival, is a celebration of Western Australian astrophotographers and astro-imagers. Our 2014 exhibition represents a milestone event, being our fifth year of exhibiting astrophotos at Astrofest. This year, we welcome our three eminent judges, Dr David Malin as well as Professor Peter Quinn and Professor Andreas Wicenec from the International Centre for Radio Astronomy Research (ICRAR). Our judges have each provided expert and critical appraisal, selection and judging for all entries into the astrophotography exhibition. Three awards recognise outstanding efforts and achievements, including the Best Astrophoto, Best Timelapse Video, and the People’s Choice Award, which is determined on the night of Astrofest.

The 2014 exhibition showcases the superb accomplishments of WA astro-imagers. Telescope based imaging combined with the power of sophisticated image processing records stunning deep space colour images of galaxies and nebulae in extraordinary detail. We also see the very strong popularity of digital cameras used for timelapse, star trail and night-time landscape images, at a myriad of locations throughout Western Australia and beyond. Notable astronomical events feature prominently in the exhibition, including the annular solar eclipse of 10 May 2013, the Southern Lights (Aurora Australis), Comet Pan-STARRS, an occultation of Jupiter by the moon and a variety of other fascinating astronomical events.

Thanks is due to the exhibition entrants, the judges, our generous printing sponsor, WPM Group, ICRAR, our prize sponsors Camera Electronic and Shoot Photography Workshops and our associates, The World At Night and Celestial Visions. Enjoy the exhibition!

John Goldsmith
Astrofest Astrophotography Curator
**Ocean Moonlight, Cradle Mountain Southern Stars**

John Goldsmith

Evocative, atmospheric impressions of moonlight filtering through a streaming mass of cloud, illuminating the ocean. Transitioning to Cradle Mountain, Tasmania, the southern stars reflect in a mirror calm Dove Lake, whilst a faint aurora (Southern Lights) appears fleetingly behind Cradle Mountain. Features a soundtrack from Sierra Leone's Refugee All Stars (reproduced by permission).

**Annular Eclipse Sunrise (10 May 2013)**

Ron Hille

A timelapse showing the annular eclipse at sunrise of May 2013 taken with a Canon Powershot SX260HS.

*Images and timelapse videos marked with a * can be viewed as part of the digital exhibition on the screens.*
*El Cielo: A Timelapse of the Atacama Night Sky*
Evelyn Chuk
This timelapse was taken in the Atacama Desert, Chile in July 2013. With little light pollution, and altitudes ranging from 2400-4500m, this area is perfect for star gazing and as a result hosts many famous telescopes, such as ALMA.
Nightscapes include sights from Valle de la Luna National Park, the front gates to the ALMA telescope site, and the general surrounds of San Pedro de Atacama. The time lapse packs over 12 hours of photographs into just over a minute.

*12 Hours in the Nullarbor Desert*
Grahame Kelaher
A 12 hour timelapse taken from dusk to dawn in the middle of the Nullarbor Desert.

*Fireball Meteor Train (Lake Ballard)*
Grahame Kelaher
A movie of a fireball meteor train created in lightroom.
Cosmic Balance
Michael Goh

Airglow, Venus and the Milky Way over the Pinnacles
Andrew Lockwood

Passage of Time
Michael Goh
ASTRONOMICAL LANDSCAPES

Southern Star Reflections
John Goldsmith

Pathway to Venus
Colin Legg

Southern Cross
John Goldsmith

South West Aurora
Colin Legg

Volcano Milky Way
Roger Groom

Red Rock Vista
Colin Legg
**ASTRONOMICAL LANDSCAPES**

*Galactic Background*
Grahame Kelaher

Milky Way sets over Wave Rock
Andrew Lockwood

Cradle Mountain, Dove Lake and Meteor
John Goldsmith

Cosmos, Grass Trees and Flower Spikes
John Goldsmith

Aboria Celestia
Pete Wheeler

Moonlit Eucalypt, Murchison
Ron Hille

Southern Cross Silhouettes
Roger Groom
Rainbow Milky Way
Roger Groom

Red at Night
Roger Groom

Perth Observatory Telescope at the Millenium Dome
John Goldsmith

Beam of Light
John Goldsmith
ASTRONOMICAL LANDSCAPES

*Bonfire BBQ
Chris Thorne

*Light Swirl
Chris Thorne

*Startrails, Lake Ballard
James Athanasou

*Startrails, Lake Ballard
James Athanasou

*Startrails, Cosmology Gallery, Gingin
James Athanasou

Campfire Under the Coal Sack
Roger Groom
ASTRONOMICAL LANDSCAPES

*Crystal Ball
Colin Legg

*Trail to the Moon
Colin Legg

*Comet Pan-STARRS, 6th March 2013
Grahame Kelaher
*Star Lore*
Chris Thorne

Spire in the Sky
Roger Groom

Airglow Island
Colin Legg
May 10th Annular Eclipse
Grahame Kelaher

Annular Eclipse, May 2013, Kurnina, WA
Grant Boxer

Jupiter Occulted by the Moon
Grahame Kelaher

Moon with Barlow
Adam Kiil

*Jupiter Set
Evelyn Chuk
IC 2994 The Running Chicken Nebula
Jim Hyndman

*M20 The Trifid Nebula
Jim Hyndman

M8 The Lagoon Nebula
Andrew Lockwood

Rho Ophiuchi to Antares
Andrew Lockwood

Omega Centauri
Grant Boxer
*The Horsehead Nebula in Orion*
Jim Hyndman

**M42 The Great Nebula in Orion**
Andrew Lockwood

**Dumbbell Nebula**
Mark Bridger

**Widefield H-alpha Tarantula**
Andrew Lockwood
DEEP SPACE

*The Great Emu
Ron Hille

*M1 The Crab Nebula
Jim Hyndman

The Silver Coin Galaxy
Andrew Lockwood

*Trifid Nebula
Grant Boxer

*Wideview Mosaic
Adam Kiil
Thakery’s Globules and the Running Chicken Nebula
Paul Luckas

*Orion Nebula
Grant Boxer

*M16 The Eagle Nebula
Jim Hyndman

*Horsehead and Flame Nebula
Mark Bridger
ASTROFEST ASTROPHOTOGRAPHY EXHIBITION 2014

Judges:
Dr David Malin

David Malin has been involved in scientific imaging all his working life. His 26 year career with the Anglo-Australian Observatory (AAO, now the Australian Astronomical Observatory) began in 1975, and he served as a photographic scientist and astronomer. Dr Malin pioneered RGB astronomical photography and was the first to produce true-colour RGB images in 1978. Dr Malin judges the national astro-imaging competition, the David Malin Awards (now in its 11th year) and he has judged several other astronomical image competitions. Dr Malin’s images are featured in many publications worldwide, and his latest book (the 11th) is “Treasures of the Southern Sky” with Rob Gendler. Image Credit: Bob Bee

Professor Peter Quinn (ICRAR)

Professor Peter Quinn is the Director of the International Centre for Radio Astronomy Research (ICRAR) in Perth, WA. He was born in Australia and has studied at both the University of Wollongong and the Australian National University (ANU) and has worked at the California Institute of Technology, the NASA Space Telescope Science Institute and the European Southern Observatory headquarters in Munich. Having worked at The University of Western Australia since 2006, Peter was appointed Director of ICRAR in 2009. In addition to his love of astronomy Peter is also an avid photographer.

Professor Andreas Wicenec (ICRAR)

Professor Andreas Wicenec is a Research Professor and head of the Information and Communication Technologies (ICT) program of ICRAR. Andreas is leading research efforts directed at the challenges of transmitting, storing and processing the enormous amounts of data generated from the radio telescope arrays being developed in Western Australia. Andreas is also a passionate photographer and can often be seen photographing ICRAR events.

Curator: John Goldsmith

Featured Astro-imagers:
James Athanasou Grant Boxer Mark Bridger Evelyn Chuk Michael Goh John Goldsmith
Roger Groom Ron Hille Jim Hyndman Grahame Kelaher Adam Kiil Colin Legg
Andrew Lockwood Paul Luckas Chris Thorne Pete Wheeler

Copyright for all images in the Astrofest 2014 astrophotography exhibition is retained by the photographers.

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ICRAR www.icrar.org
The World At Night www.twanight.org
Celestial Visions www.celestialvisions.com.au

This exhibition was held as part of Astrofest 2014 at Curtin Stadium, Perth on the 8th of March.