

14-16 AUGUST

ULURU ASTRONOMY WEEKEND 2015



CELEBRATING THE VAST OUTBACK NIGHT SKY

Designed for astronomy enthusiasts of all ages, Ayers Rock Resort, in partnership with the ARC Centre of Excellence for All-sky Astrophysics (CAASTRO), plays host to the Uluru Astronomy Weekend.

Hosted by popular scientific personality and celebrated author Dr Karl Kruszelnicki, along with some of the world's leading experts, this enlightening weekend will include engaging discussions on astro-statistics and the structure of the cosmos, fun family activities and demonstrations, an exciting Galaxy Star Dinner and more.

Entry | *free*

Charges apply for Signature Events  

2015 | 2016 *events*

Throughout the year Ayers Rock Resort hosts a number of special experiences and major annual events that will add yet another element to your stay. With activities, performances and events that encompass culture, fashion, sports, astronomy, music and art, Ayers Rock Resort's spectacular line-up of vibrant events offers even more reasons to revisit the spiritual heart of Australia.

ACO ULURU FESTIVAL 30-31 October 2015



TJUNGU FESTIVAL 22-25 April 2016

ULURU CAMEL CUP 27-28 May 2016

AUSTRALIAN OUTBACK MARATHON 30 July 2016

ULURU ASTRONOMY WEEKEND 26-28 August 2016

**CHAT
TO US
TODAY**

Reservation enquiries
+61 2 8296 8010
From Australia 1300 134 044
Visit ayersrockresort.com.au
  ExploreUluru

Voyages Ayers Rock Resort is managed as an Indigenous centre of excellence by Voyages Indigenous Tourism Australia, a subsidiary of the Indigenous Land Corporation. We work together to represent the interests of the traditional owners and local Indigenous communities. Voyages seeks to offer visitors a genuine Indigenous experience while making a difference for Indigenous communities through employment, development and business opportunities in tourism.

VOYAGES
**AYERS
ROCK
RESORT**
TOUCH THE SILENCE

“

The Australian Outback is a haven for stargazers and perhaps one of the best places in the world to explore the galaxies in the night sky. Join me for a spectacular stargazing weekend, listen as we decode the night sky or enjoy the full astronomical experience at one of our signature events.

If you're familiar with the night sky, you'll have a fantastic opportunity to gain new insights, and if you're new to studying the cosmos, be inspired with an exciting introduction to the wonders of the universe.

”

**Dr Karl
Kruszelnicki**



MEET

your host for the weekend

Dr Karl His presentations Great Moments in Science® celebrate all sides of science; from sublime moments of deep thought to the most arcane and bizarre research imaginable. The universe is a strange and wonderful place and, in his Great Moments, Karl has scaled the highest peaks as well as turned over the pebbles to see what's underneath. Karl made his TV debut in 1985 as the presenter of the first series of Quantum, while today Karl popularises science on ABC radio stations across Australia and, on the BBC, for several hours each week.



your astronomers

Prof. Roger Davies is the Philip Wetton Professor of Astrophysics at Oxford University in the UK. He is one of the "Seven Samurai" collaboration that discovered a concentration of mass in the Universe called the 'Great Attractor'. As an astronomer and cosmologist, he concentrates his research on cosmology and how galaxies form and evolve.



Assoc. Prof. Emma Ryan-Weber leads the "Intergalactic Medium" research group in the Centre for Astrophysics and Supercomputing at Swinburne University. She discovered the oldest and most distant carbon in the Universe, and the darkest star-forming neighbour of our own Milky Way galaxy, Leo T.



Prof. Steven Tingay seeks out experiments that are difficult and risky, but potentially have high rewards. Today, he's the Director of the Murchison Widefield Array (MWA) project, a low-frequency radio telescope worth \$50-million. Steven is also a key contributor to the Square Kilometre Array (SKA) project, which will help mankind look further into space than ever before.



Prof. Rachel Webster has had a stellar career teaching and researching astronomy for over 20 years. Her work has been internationally recognised with international prestigious scholarships. She was the inaugural AIP Woman in Physics Lecturer. In 1992, she took up a position as a teaching and research academic at the University of Melbourne within the School of Physics where she currently leads the Astrophysics research group.



FRIDAY *14 August*

SATELLITE MARKETPLACE

2pm - 5pm | Uluru Meeting Place

TRADITIONAL INMA WELCOME TO COUNTRY

2.30pm - 3pm | Amphitheatre

HOW DID THE UNIVERSE BEGIN?

3pm - 4pm | Amphitheatre

ASTRO PHOTOGRAPHY ESSENTIALS

4pm - 4.30pm | Uluru Meeting Place (Wanari Room 1)

HANDS ON ASTRONOMY: FAMILY 🧑🏻‍🤝‍🧑🏻

4pm - 4.30pm | Amphitheatre

STELLAR SOUNDS OF SILENCE 💰 ★

5.30pm - 9.30pm | Outdoor Dining Site (Pick up from Hotel)

ASTRO PHOTOGRAPHY IN ACTION

10pm - 11pm | Astro Site (Meet at Resort Town Square)

DARK COSMOS

11pm - midnight | Astro Site (Meet at Resort Town Square)

SATURDAY *15 August*

SATELLITE MARKETPLACE

10am - 6pm | Uluru Meeting Place

NEW HORIZONS: HOW WAS PLUTO DISCOVERED?

10.30am - 11.30am | Uluru Meeting Place (Wanari Room 1)

OUR PLACE IN SPACE

10.30am - 11.30am | Uluru Meeting Place (Wanari Room 2)

SPACE RACE: FAMILY 🧑🏻‍🤝‍🧑🏻

11.30am - 12.30pm | Amphitheatre

ASTRO TRIVIA WITH BUFFET LUNCH 💰 ★

12.30pm - 2pm | Uluru Meeting Place (Tjungu Ballroom)

GALAXIES + BLACK HOLES

2pm - 3pm | Uluru Meeting Place (Wanari Room 1)

THE VAST ARRAY OF THE MWA TELESCOPE

2pm - 3pm | Amphitheatre

NEW HORIZONS: HOW WAS PLUTO DISCOVERED?

3pm - 4pm | Uluru Meeting Place (Wanari Room 1)

OUR PLACE IN SPACE

3pm - 4pm | Uluru Meeting Place (Wanari Room 2)

GALAXIES + BLACK HOLES

4pm - 5pm | Uluru Meeting Place (Wanari Room 1)

THE VAST ARRAY OF THE MWA TELESCOPE

4pm - 5pm | Amphitheatre

GALAXY STAR DINNER 💰 ★

7pm - 11pm | Uluru Meeting Place (Tjungu Ballroom)

SUNDAY *16 August*

THE WONDERS OF THE MWA TELESCOPE

Dr Karl & Professor Steven Tingay

8.30am - 9.15am | Amphitheatre

Q & A WITH DR KARL + OUR GUEST ASTRONOMERS

9.15am - 10am | Uluru Meeting Place (Wanari Room 1)

ULURU ASTRONOMY WEEKEND CONCLUDES

SIGNATURE *events*

Friday 14 August

STELLAR

SOUNDS OF SILENCE \$ ★

Departs from 5.15pm | Desert Dining Site

Check with your hotel reception for pick-up time

As the sun sets over Uluru, enjoy canapés and chilled sparkling wine and, as darkness falls, join your table of fellow travellers for an unforgettable dining experience, accompanied by a traditional Aboriginal dance performance under the outback sky. Our attentive staff will keep your glass full with a quality selection of Australian wine and beers while your first course is served.

Enjoy a bush tucker inspired buffet, then settle back and listen to Dr Karl and guest astronomers as they decode the southern night sky. After an unforgettable stargazing experience, your evening will end with an aperitif under the stunning Milky Way.

Adult \$195 | Child \$97.50 (10-15 years)

Children 9 years and under are not catered for
Bookings essential

Saturday 15 August

ASTRO TRIVIA LUNCH \$ ✨ 3

12.30pm - 2pm | Tjungu Ballroom Uluru Meeting Place

While you sit back and enjoy a delicious continental style lunch, test your astronomical knowledge and challenge others, as MC Dr Karl and our guest astronomers and speakers lead competing tables of teams for who knows most about the cosmos with a fun trivia competition, complete with astro-themed prizes.

Adult \$45 | Child \$22.50 (10-15 years)

Children under 10 years attend free
Bookings essential

Saturday 15 August

GALAXY STAR DINNER \$ ★ 3

7pm - 11pm | Tjungu Ballroom Uluru Meeting Place

Celebrate the final night of the Uluru Astronomy Weekend beginning with drinks at our outdoor space lounge as you stargaze into the night sky using a telescope. Enjoy a BBQ buffet dinner that includes a selection of mouth-watering hot and cold courses and a chef's selection of desserts. An after dinner speech on amusing and fascinating 'factoids' by the infectiously enthusiastic MC Dr. Karl follows, then your evening culminates with space themed music from 'Stars on 45' to a spectacular dance version of 'Dark Side of the Moon.' Set to be a star studded affair, this is an event not to be missed.

Adult \$95 | Child \$47.50 (10-15 years)

Includes a 3 hour beverage package for adults and mocktails for children
Children 9 years and under are not catered for
Bookings essential



SIGNATURE EVENTS BOOKINGS ARE ESSENTIAL

BOOK AT YOUR HOTEL RECEPTION OR AT THE TOUR INFORMATION CENTRE AT RESORT TOWN SQUARE

EVENTS

SATELLITE MARKETPLACE 4

Market stalls providing event information, fun merchandise, books and t-shirts.

TRADITIONAL INMA WELCOME TO COUNTRY 5

Senior Anangu elders and young performers offer you the privilege to share in a traditional Inma dance.



HOW DID THE UNIVERSE BEGIN? 5

Dr Karl Kruszelnicki

All scientific experts agree on the Big Bang. The burning question around the world is 'what happened after that?' Dr Karl adjudicates a lively great debate on this hotly contested topic.



ASTRO PHOTOGRAPHY ESSENTIALS 1

A primer session led by **Professor Steven Tingay** to prepare photographic enthusiasts for *Astrophotography in Action* sessions.



HANDS ON ASTRONOMY: FAMILY 5

Assoc. Professor Emma Ryan-Weber will give kids big and small an interactive introduction to Astronomy with each participant making their own planet inside a bottle to simulate its conditions and see if life will flourish!



ASTRO PHOTOGRAPHY IN ACTION 6

Professor Steven Tingay will take you through the camera lens to actively discover best techniques for capturing the night sky.

DARK COSMOS 6

Professor Rachel Webster speaks to super-enthusiasts about the dark energy and dark matter in our skies.



NEW HORIZONS: HOW WAS PLUTO DISCOVERED? 1

Look at the original images used by Clyde Tombaugh to discover Pluto and investigate the concept of parallax with a hands-on activity.

OUR PLACE IN SPACE 2

Professor Rachel Webster

traces the history of the universe, describing the very latest results from a wide range of experiments. Details of what we know about the early universe and recent attempts to find other planets that might host life is also discussed.



GALAXIES + BLACK HOLES 1

Opening with an overview of the properties of galaxies and black holes, **Professor Roger Davies** will share exceptional data from Hubble Space Telescope, which astronomers have used to discover supermassive black holes at the very centre of colossal galaxies.



THE VAST ARRAY OF THE MWA TELESCOPE 2

Professor Steven Tingay will discuss a new radio telescope built in remote Western Australia - the Murchison Widefield Array (MWA) and deliver an insightful overview on what the MWA is teaching us about the Universe and how it will blaze a path for future telescopes.



SPACE RACE: FAMILY 5

An energising, interactive session on how the race to be the first country to land on the moon began.

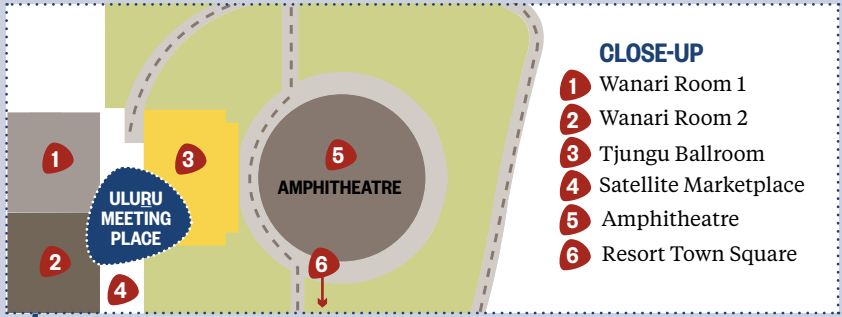


Q & A WITH DR KARL + OUR GUEST ASTRONOMERS 1

Dr Karl hosts a lively recap of the weekend's event with our four astronomers answering any final questions from guests.



MAP



SHARE YOUR STORY

After checking into your hotel, check-in at Explore Uluru on Facebook.



Upload and tag your Uluru Astronomy Weekend photos on Instagram #ExploreUluru and to facebook.com/ExploreUluru



SYMBOL GUIDE

💰 *paid event- bookings essential*

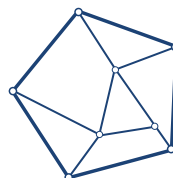
☀️ *day event*

🌙 *night event*

★ *signature event*

😊 *family friendly event*

The Astronomy Weekend at Ayers Rock Resort works in partnership with CAASTRO, the Australian Research Council Centre of Excellence for All-sky Astrophysics, a collaborative research centre comprising staff and students from the University of Sydney, Australian National University, University of Western Australia, Swinburne University of Technology, University of Melbourne, University of Queensland, and Curtin University of Technology and international and national partners. Visit www.caaastro.org



CAASTRO
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FOR ALL-SKY ASTROPHYSICS