



Brisbane

PECAN+ Capture the Flag – Cyber Security Competition

Saturday 3 – Sunday 4 August

10am-5pm

TAFE Queensland (South Bank)

<https://www.scienceweek.net.au/event/pecan-capture-the-flag-cyber-security-competition/south-brisbane/>

PECAN+ CTF 2024 is a Capture the flag cyber security competition. Designed for beginner, intermediate and advanced high school students in Years 10 to 12. Compete nationally to solve challenges in a range of topics areas including cryptography, digital forensics, OSINT, reverse engineering, steganography & web exploitation.

Team and registration format: Compete in Teams of up to 4 students. If you are registering as an individual, you will be placed in a Team on the day. PECAN+ is founded and led by Edith Cowan University. In collaboration with Universities, TAFEs and the Australian cyber security ecosystem.

QX – Queensland Advanced Technologies Future

Tuesday 13 August

12pm-6.30pm

The Precinct, Level 2, 315 Brunswick Street, Fortitude Valley

<https://www.scienceweek.net.au/event/qx-queensland-advanced-technologies-future/fortitude-valley/>

Quantum technology is reshaping our industries in a new era of innovation. But how much do we really know about it? And are we truly 'quantum ready'?

Join us for a one-day symposium to dive into the fascinating world of quantum. Whether you're a researcher, industry professional, investor, or government representative, this is your chance to explore the opportunities in Queensland's growing technology scene.

From Pixels to Pills – Why we should be 3D printing medicines

Friday 16 August

2pm-5.30pm

UQ Dutton Park Campus

<https://www.scienceweek.net.au/event/from-pixels-to-pills-why-we-should-be-3d-printing-medicines/woolloomgabby/>

3D printed pharmaceuticals are gaining traction in the healthcare sector. In this half-day workshop you will discover why. You will explore this fascinating research with informative talks. A live demonstration of 3D printing tablets, and the opportunity to design and print their own.

Kicking off this workshop is a presentation from guest speaker Dr Jared Miles who will discuss his experience as a pharmacist, 3D printing researcher, and explore why 3D printed pharmaceuticals should be brought into the clinic.

You will then rotate through several stations that give hands-on experience with 3D printers producing tablets.

Science Social Brunch: Connect with Brisbane's science communicators!



Saturday 17 August

10am-12pm

Mi Casa Café, South Brisbane

<https://www.scienceweek.net.au/event/science-social-brunch-connect-with-brisbanes-science-communicators-and-enthusiasts-3/south-brisbane/>

Join us for a fun-filled brunch event that aims to bring together Brisbane's science communicators and enthusiasts. Now a regular event, this month's brunch coincides with the National Science Week celebrations. It will be an inclusive and welcoming environment for all.

Brewing for Biodiversity

Sunday 18 August

2.30pm-4.30pm

Straddie Brewing Co, Dunwich

<https://www.scienceweek.net.au/event/brewing-for-biodiversity-species-survival-in-moreton-bay-2/dunwich/>

Join us to learn about Quandamooka's biodiversity while enjoying a specially-brewed pale ale! For this event, join us for an entertaining discussion about Quandamooka's outstanding biodiversity. Chat over a hazy pale ale, specially brewed for Moreton Bay's Biodiversity by the Straddie Brewery Co. The discussion will cover the conservation action needed for a healthy Moreton Bay. Learn from scientists from the University of Queensland's Centre for Biodiversity and Conservation Science. Together, we'll play a game of 'Species Survivor'.

National Quantum and Dark Matter Road Trip

Sunday 4 August

10am-2pm

The University of Queensland Open Day

<https://www.scienceweek.net.au/event/national-quantum-and-dark-matter-road-trip-6/st-lucia/>

The National Quantum and Dark Matter Road Trip is coming to a city or town near you. As a part of National Science Week, a team of scientists and science communicators will travel around Australia, delivering engaging presentations, hands-on activities, pub quizzes and more.

The nature of dark matter is one of the biggest mysteries of the Universe, and Australia is a key player in the quest to figure it out. Dark matter accounts for 84% of all the matter in the Universe, but we don't yet know what it is. Quantum technologies are crucial in the hunt for dark matter. They are already used in smart phones and cars, medical imaging, manufacturing and navigation. Yet today's technologies capture only a small fraction of the potential of quantum physics.

Our road-trippers are looking forward to spreading their knowledge and enthusiasm of quantum and dark matter. They hope to inspire the next generation of scientists and engineers and highlight the potential of quantum technologies and dark matter discovery for the future of our society.

We will be traveling from Brisbane through the Northern Territory across to Broome from 4 to 19 August as well as holding individual public events in different states and territories during National Science Week and beyond.

Space Family Fun Day

Saturday 10 August

10am-3pm

UniSQ – Springfield



<https://www.scienceweek.net.au/event/space-family-fun-day/springfield-central/>

The iLAUNCH Trailblazer is bringing a Space-themed Family Fun Day event to Springfield. This exciting event will be a day filled with interactive activities. Such as water rockets, lightning talks for children, teens and adults and a sunspots activity with solar telescopes. Our talks will dive into topics such as space technology, moon and mars, and the sustainability of space. Discover the newest space technologies and gain insights into upcoming missions to Mars and beyond.

Our esteemed speakers will include Dr. Joni Sytsma, renowned Aerospace and Aeronautical Engineer. She will discuss her work within Additive Manufacturing within the space industry. Local educators and astronomers will also be part of the agenda to share their passion for space.

Platypus Watch

Sunday 11 August

4.45am – 8am

Robelle Domains Parkland, Springfield

<https://www.scienceweek.net.au/event/platypus-watch-2/springfield-central/>

Have you ever seen a platypus in the wild?

Springfield Lakes Nature Care Inc. is holding a Platypus Watch survey! The event will help to record observations of platypus to help scientists monitor these shy mammals. This research aims to find out how platypus are doing during the effects of climate change, flood and drought.

There will be a survey on 3 different creek systems on **Sunday, 11 August from 4.45am**. The best time to observe platypus is just after dawn, so you must be prepared to sit quietly for up to 2 hours observing a creek on a cold winter morning.

To be a volunteer for this event, you must register your expression of interest before ticket sales close on **July 30**. Only registered ticket holders will be supplied with survey information. Places are limited so please register as soon as possible.

Planetarium Concert – Live music in the skydome

Saturday 17 August

6.30pm – 9pm

Sir Thomas Brisbane Planetarium

<https://www.scienceweek.net.au/event/planetarium-concert-live-music-in-the-skydome-2/toowong/>

Award-winning songwriter and science communicator Nate Eggins (a.k.a. Conspiracy of One) is bringing his signature sciency music to the Sir Thomas Brisbane Planetarium. Experience a truly special stripped back and intimate performance as you are taken on a journey through the stars inside the magnificent skydome!

Back again after a phenomenal response from last year's shows, this year offers even more with music from Nate and the band, stunning visuals, free popcorn and 'Homeopathic Cocktails', and now, talks by special guests: UQ professors Tamara Davis and Benjamin Pope!

Gold Coast

Robotics and Coding Workshop

From Saturday 10 August



Robina Community Centre

<https://www.scienceweek.net.au/event/robotics-coding-workshop/robina/>

You can also follow this event online [here](#)

Our robotics workshop is designed for hands-on robotics learning and a whole lot of fun, for students aged 6 to 12. Project-based and child centred, these fun and educational program is the perfect sessions to keep students entertained and learning across the school break.

Robots used

- Age 6+ Lego WeDo 2.0
- Age 8+ Lego Spike Prime

Little Alphas offer fun and challenging activities that keep children of all ages engaged for hours.

Ecofest Back to the Creek 150

Saturday 31 August

9am-3pm

Cedar Creek, Ecofest, Cedar Creek

<https://www.scienceweek.net.au/event/ecofest-back-to-the-creek-150/cedar-creek/>

Cedar Creek is turning 150 years old. We want to keep our school environment going for the next 150 years. We have a sustainability focus in our local school assist the environment in local area. Students are collecting data on their lunch box rubbish. Investigations into " reuse "- materials that can be used more than once, or for more that one purpose.

Wide Bay Region

STEAMzone Twilight Science Market

Saturday 3 August

4pm-7pm

Rainbow Beach Community Hall and adjacent parklands

<https://www.scienceweek.net.au/event/steamzone-twilight-science-market/rainbow-beach/>

STEAMzone Twilight Science Market is fun family friendly event.

ome along for some scientists encounters to ask hard questions. Hear about their amazing research and get up close with live specimens.

Hands of activities for the children include:

- Sensory science play with Australian Animals
- Weird & Wonderful Water Bugs
- Rad Reactions with Fantastic Fizz
- Tinker Trays for Budding Engineers
- Insect Zoo
- Colouring Competition

Central Queensland

STEM in the Outback – National Science Week 2024 Queensland Launch in Cloncurry

Saturday 10 August

10am-2pm



Cloncurry Community Precinct

<https://www.scienceweek.net.au/event/stem-in-the-outback-national-science-week-2024-queensland-launch-in-cloncurry/cloncurry/>

Join the first launch of National Science Week Queensland in a remote outback location! Come along to experience a variety of science, technology, engineering and mathematics in action. Meet professionals from local industry, government organisations and university researchers. STEM in the Outback is free and open to everyone, suitable for all ages!

STEM in the Outback is proudly presented in partnership with the Cloncurry Shire Council. This event is hosted by Inspiring Australia Queensland.

The Sound of Symmetry

Saturday 10 August

12.30pm – 2pm

Cloncurry Art Gallery

<https://www.scienceweek.net.au/event/the-sound-of-symmetry/cloncurry/>

This combined lecture and performance introduces audiences to mathematical concepts of symmetry and how they can be expressed artistically in newly composed music. Mathematician Artem Pulemotov will explain principles for different types of symmetry that are central to modern mathematics and physics, while musicologist Denis Collins will explain contexts for how symmetry can be represented in musical sound. Although simple symmetries have occurred in musical works in the past, there has been no exploration of sophisticated symmetries known to mathematicians and physicists. This event will showcase a new work by composer Robert Davidson and performed by the contemporary group Topology that will demonstrate novel ways to musically respond to the mathematics of different kinds of symmetry. Questions and discussion with the audience will conclude this event.

National Quantum and Dark Matter Road Trip

Thursday 8 August

7pm-9pm

Pub Trivia, Leichhardt Hotel, Cloncurry

<https://www.scienceweek.net.au/event/national-quantum-and-dark-matter-road-trip-6/cloncurry/>

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North Queensland

DIY Projects at Homework Club

Monday 12 August – Friday 16 August

3pm-4pm

Croydon Shire Council Library

<https://www.scienceweek.net.au/event/diy-projects-at-homework-club/croydon/>

Discovering the fun in science with daily afternoon activities conducted at the Croydon Shire library. Participants will have the chance to create experiments with a new DIY project featured every day during Homework Club.

Townsville Science Week

Wednesday 14 August

9am-11am

Riverway Parklands

<https://www.scienceweek.net.au/event/townsville-science-week/thuringowa-central/>

Welcome to Townsville Science Week 2024. A captivating celebration tailored for families with children aged 0-12. Riverway Parklands will transform into an interactive wonderland of discovery. Offering enriching experiences designed to ignite a passion for science. Join us to embark on a journey of exploration, learning, and fun. Let's celebrate together as we inspire the next generation of scientists, innovators, and curious minds. Don't miss this opportunity to spark your child's curiosity and ignite their passion for science.

Forest Doctors

Friday 16 August

2pm-5.30pm

Branch Bounty, Julatten

<https://www.scienceweek.net.au/event/forest-doctors/julatten/>

This National Science Week, join Forest Doctors for a one-day youth and citizen scientist workshop. In this workshop, you'll learn all about forest plants which have diseases. You'll be introduced to the history of plant pathology, with a particular focus on pathogenic fungi of trees. We'll then embark on a specimen collection activity, where you'll hunt for plant material based on the signs and symptoms of disease. You'll then have the opportunity to isolate a pathogenic fungi from a living sample, and observe its features under a microscope. No prior knowledge of plant pathology or microscopy is needed. All training will be provided on the day!

National STEM Roundtable

Saturday 17 August

1pm-5pm

Trinity Bay State High School

<https://www.scienceweek.net.au/event/national-stem-roundtable/manunda/>

The National STEM Roundtable proposes to examine the issues that impact far northern Australian residents directly and provides a response to research outcomes on issues critical to our region.



South Western Queensland

Agriculture Science Expo and Schools Plant Science Competition

Tuesday 13 August

9am-2.30pm

DAF Hermitage Research Facility, Warwick

<https://www.scienceweek.net.au/event/awards-day-ag-science-expo-2024-daf-hermitage-schools-plant-science-competition/warwick/>

Help us celebrate National Science Week this year at the Department of Agriculture and Fisheries (DAF) Hermitage Research Facility's Schools Plant Science Competition Awards Day & Ag Science Expo. This event formally recognises prize winners and participants of the 'Fishing & Farming for the Future' themed competition and celebrates all things agricultural science.

You'll have the opportunity to listen to inspiring speeches from our guest speakers including celebrity TV host, **Scott Hillier**, from CH7's Creek to Coast, mingle with DAF scientists and learn about our current research programs during a guided tour of the Hermitage Research Facility, discover various careers in science and agriculture and participate in an array of interactive displays in 'ScienceShow Alley' including the dynamic SteetScience show and the fin-tastic D'Aguilar Wildlife Hide & Sea show.

Space Family Fun Day

Saturday 17 August

10am-3pm

UniSQ – Toowoomba

<https://www.scienceweek.net.au/event/space-family-fun-day-toowoomba-qld-2/toowoomba/>

The iLAUNCH Trailblazer is bringing a Space-themed Family Fun Day event to Toowoomba.

This exciting event will be a day filled with interactive activities. Such as water rockets, lightning talks for children, teens and adults and a sunspots activity with solar telescopes. Our talks will dive into topics such as space technology, moon and mars, and the sustainability of space.

Discover the newest space technologies and gain insights into upcoming missions to Mars and beyond.

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Brain Break – St George Library

Wednesday 21 August

10am-12pm

St George Library

<https://www.scienceweek.net.au/event/brain-break-st-george-library/st-george/>

Join us for morning tea to celebrate National Science Week. CUC Balonne will be working in conjunction with the St George Library to host our Brain Break Morning Tea event.

National Quantum and Dark Matter Road Trip

Monday 5 August



7pm-9pm

Pub Trivia, Criterion Hotel, Dalby

<https://www.scienceweek.net.au/event/national-quantum-and-dark-matter-road-trip-6/dalby/>

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Online Events

The Big Bloody Slime Experiment

Saturday 10 August – Saturday 17 August

9am-12pm

<https://www.scienceweek.net.au/event/the-big-bloody-slime-experiment/>

What is in blood? What do all the parts do? And what has this all got to do with slime?

Dr Rob and the Australian Red Cross Lifeblood team up to investigate the wonderful world of blood. All whilst adding a little extra, the science of slimes, along the way. Making a slime-based version of fake blood (with all the components) is not just scientific and educationally insightful, it's also a bloody good time!

This is a sequel to last year's Big Bloody Experiment, and if you liked that, hopefully you'll love this. It is designed to capture the attention of the whole class all while making batches of slime-based blood. There will be easy to follow videos explaining what to do, the science behind it all, links to the real world and some teacher tips.

There will be a broad range of topics covered, including:

- what's in our blood
- what those blood cells all do and how it is vital for us
- the strange ways of slime
- slimes out there in nature

Q&A with Dr Karl

Tuesday 13 August

2pm-3pm

As we celebrate National Science Week we are kicking off the newly formatted STEM 2024 professional learning series with Dr Karl Kruszelnicki. This year's National Science Week schools



theme is “Species Survival – More Than Just Sustainability”, so get your questions about threatened species, habitats and all manner of living things ready for Dr Karl.

This live and free event is the chance for students to ask Dr Karl the questions they have always wondered about. Dr Karl encourages curiosity and all questions from attendees are welcome.

Illustrate Your Future

Until Friday 16 August

9am-5pm

<https://www.scienceweek.net.au/event/illustrate-your-future/>

Are you ready to unleash your creativity and share your dreams with the world?

We're excited to invite you to our free online event, "Illustrate Your Future," as part of National Science Week. This is your chance to visualise and illustrate your dreams of becoming anything you want. This could be a scientist, mathematician, engineer, programmer - any profession that inspires you.

Every applicant will receive a FREE copy of “Wondrous Worlds: The Extraordinary Adventures of a Curious Mathematician” by Katie Buchhorn.

Dancing with Diprotodons

Sunday 11 August

11am-12.30pm

<https://www.scienceweek.net.au/event/dancing-with-diprotodons/naracoorte/>

You can also follow this event online [here](#)

Join Professor Flint to launch his latest album, "Dancing with Diprotodons"!

This National Science Week, Professor Flint returns to launch his new album and spend time in the community celebrating local stories.

"Dancing with Diprotodons" is a new album inspired by the stories of Australia's megafauna.

Species That Like it Hot – UCTV Alive for Kids Webinar with Dr Paige Kelly

Monday 12 August

2pm-2.30pm

<https://www.scienceweek.net.au/event/species-that-like-it-hot-uctv-alive-for-kids-webinar-with-dr-paige-kelly/>

Just as weeds appear in the garden with warmer weather. What grows in our oceans shifts as the water temperature rises.

Dr Paige Kelly had the opportunity to travel to Antarctica and explore the current situation. Dr Paige will share her findings with you through cartoons, demonstrating that science can be both colourful and enjoyable!