



International
Centre for
Radio
Astronomy
Research

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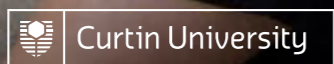


THE NEXT GENERATION

CASE STUDY



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TRAINING THE NEXT GENERATION

ICRAR is committed to providing the best research training and an environment in which its talented students can thrive. Many of the Centre's PhD and Masters students have gone on to achieve prestigious positions in astronomy, engineering and data science across the globe.



DR THOMAS RUSSELL
VENI RESEARCH FELLOW, UNIVERSITY OF AMSTERDAM
COMPLETED 2015

As a PhD student, Tom's observations of black holes helped uncover how the jets around black holes are produced, how they are launched, accelerated and collimated, and affect the surrounding space.

Tom presented his work at Harvard, Oxford, Michigan, Amsterdam and Southampton Universities and won the ExxonMobil Student Scientist of the Year at the 2015 WA Premier's Science Awards.

After his PhD, Tom accepted a prestigious fellowship from the The Netherlands Organisation for Scientific Research, NWO, which he took up at the University of Amsterdam. He now works with highly-regarded experts from all over the world, travelling and presenting at conferences and institutes in Europe, the US and Australia.

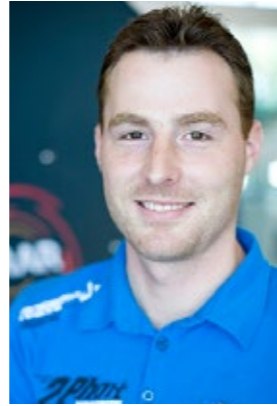


DR CHITTAWAN CHOEYSAKUL
RESEARCHER AND AIDE TO THE CHIEF OF STAFF, ROYAL THAI NAVY
COMPLETED 2016

Chittawan's PhD research saw him investigate the feasibility of a small reverberation chamber for radio frequency emission measurements. He worked on developing a long-range communication system, automated programming and controlling, noise reduction, antenna design and the detection of very low power signals.

Chittawan believes the biggest benefit of his PhD was the skills he learnt in understanding, analysing and solving problems. He enjoyed the high standard, environment and atmosphere of studying at ICRAR so much he wants to see it replicated within Thailand's education system.

Chittawan is currently helping to develop a seaplane as a researcher on a Royal Thai Navy project. He is also an assistant to a member of Thailand's National Legislative Assembly.



DR FLORIAN BEUTLER
RUTHERFORD FELLOW, UNIVERSITY OF PORTSMOUTH
COMPLETED 2013

Florian's PhD studies made headlines around the world when he made the best ever measurement of the expansion of the Universe at low redshift. His research also saw him test theories of modified gravity.

Florian went on to accept a postdoctoral position at the Berkeley Lab in California, where he worked on the Baryon Oscillation Spectroscopic Survey (BOSS). His research revealed how big the Universe was one billion years ago to one per cent precision.

In 2018, Florian will take up a Royal Society Fellowship, a prestigious position for outstanding scientists who are in the early stages of their research career and have the potential to become leaders in their field.



DR JACINTA DELHAIZE
POSTDOCTORAL RESEARCHER, UNIVERSITY OF ZAGREB
COMPLETED 2013

Jacinta's PhD research looked at faint signals of hydrogen gas, and she developed a technique called 'stacking' to detect signals from further out into the Universe than would otherwise be possible. Jacinta was co-supervised at the University of Oxford, allowing her to spend between one and three months a year at the renowned university.

Jacinta was one of the seven Australian PhD students selected to attend the 2012 Lindau Meeting of Nobel Laureates (Physics). She was also heavily involved in outreach, becoming the inaugural Travelling Scientist for the SPICE program, participating in the Aspire to Astronomy tour of the Pilbara and meeting Buzz Aldrin.

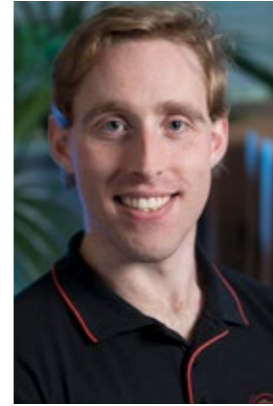
Jacinta now works in Croatia on a new radio survey taking advantage of the upgraded Very Large Array radio telescope. She has presented to the European Space Agency and was invited to talk to Foreign Minister Julie Bishop during a recent visit.



DR MORAG SCRIMGEOUR
DATA SCIENTIST, SQUARE
COMPLETED 2013

Morag's PhD research featured in New Scientist and more than 30 other news publications in half a dozen countries when she measured the large-scale homogeneity of the galaxy distribution using the WiggleZ Dark Energy Survey. Her work was the best measurement of large-scale homogeneity in the Universe to date. In 2015, the Astronomical Society of Australia awarded her the Charlene Heisler Prize in recognition of her outstanding thesis.

After her PhD, Morag accepted a postdoctoral fellowship at the University of Waterloo and Perimeter Institute in Canada, investigating a technique for measuring the neutrino mass using galaxy velocities. She later completed an Insight Data Science Fellowship to transition into data science in Silicon Valley. Morag now works as a data scientist at Square, a San Francisco company that aims to economically empower small businesses.



MR DAVID GOZZARD
POSTDOCTORAL RESEARCHER, ICRAR

David's research involves developing technologies to synchronise the SKA antennas to extremely high levels of precision. His PhD research saw him performing tests at observatories around the world, meeting countless enthusiastic and dedicated scientists and engineers along the way. These included Mt Stromlo, the Murchison Radioastronomy Observatory and Paul Wild Observatory in Australia, Jodrell Bank in the UK and MeerKAT in South Africa.

In 2017, David won the ExxonMobil Student Scientist of the Year at the WA Premier's Science Awards. He is now a postdoctoral researcher at ICRAR where he continues to help lay the groundwork for the SKA.



DR PHILIP CROSBY
ASSISTANT DIRECTOR AND STRATEGIC PLANNING AND MAJOR PROJECTS SPECIALIST, CSIRO ASTRONOMY AND SPACE SCIENCE
COMPLETED 2012

As a mature-age research student, Phil credits his PhD years with launching a new phase of his career at CSIRO. His research into improving success with high-tech mega-projects complemented membership of the concept development team for the SKA.

Phil also gained deep access to game-changing projects, such as CERN's Large Hadron Collider, the ALMA telescope, the ITER Fusion Reactor, and involvement in NASA's project management centre.

Phil's expertise is highly sought after by high-tech projects around the world. He turned his PhD thesis into a practical guide for project practitioners and, after establishing CSIRO Astronomy and Space Science's project office in WA, he now leads CASS strategic planning.

