



Australia Telescope Users Committee

APR2025

I would like to begin by acknowledging the Wallumattagal as the Traditional Owners of the land I'm joining from today and pay my respect to their Elders past and present.





ATUC Meeting Code of Conduct

The organisers of this meeting are dedicated to providing a **harassment-free experience for everyone**, regardless of age, gender, gender identity and expression, sexual orientation, disability, physical appearance, body size, nationality, race or religion. We expect our attendees to contribute to a **professional and respectful atmosphere**. All attendees, speakers and organisers are required to comply with the Code of Conduct. Organisers will enforce this code throughout the meeting to ensure a safe, inclusive and welcoming environment for everyone.

In practical terms:

- Treat each other with respect and consideration
- Behave in a professional manner
- Critique ideas, not individuals
- Be kind

<https://www.atnf.csiro.au/about-atnf/governance/atuc/atuc-code-of-conduct/>





Australia Telescope User Committee

- Stas Shabala (chair)
- Vanessa Moss (executive officer)
- Craig Anderson
- Hayley Bignall
- Adelle Goodwin
- Karen Lee-Waddell
- Marcus Lower
- Yik Ki (Jackie) Ma
- Gavin Rowell
- Sanja Lazarevic (student)
- Kovi Rose (student)



Australia Telescope National Facility

ATUC meeting
9 April 2025

Australia's National Science Agency





Understanding the Universe

Astronomy enables humanity to better understand our Universe and contributes to building future industries.



Australia Telescope National Facility (ATNF)



ASKAP radio telescope
Wajarri Country



International SKA project

Inyarrimanha Ilgari Bundara,
our Murchison
Radio-astronomy
Observatory



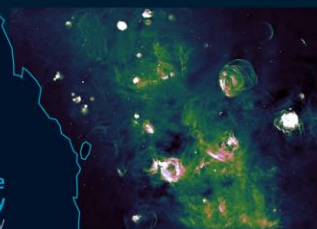
Australia Telescope Compact Array
Gomeri Country

Mopra radio telescope
Gamilaroi Country

Murriyang, Parkes radio telescope
Wiradjuri Country



Technology development



Radio astronomy research



Broader space applications



Australia Telescope User Committee

- Stas Shabala (chair)
- Vanessa Moss (executive officer)
- Craig Anderson
- Hayley Bignall
- Adelle Goodwin
- Karen Lee-Waddell
- Marcus Lower
- Yik Ki (Jackie) Ma
- Gavin Rowell
- Sanja Lazarevic (student)
- Kovi Rose (student)



Departing ATUC members

- Craig Anderson
- Yik Ki Ma
- Kovi Rose (student member)
- Vanessa Moss (Executive Officer)

New members will be appointed by the ATSC when they meet in May.



Incoming steering committee members

Chair: Lister Staveley-Smith (UWA/ICRAR)

Tamara Davis (University of Queensland)

Gregg Hallinan (Caltech)

Patricia Kelly (Univ, of Canberra; Australian Stakeholder Community)



Outgoing steering committee members

Chair: Tara Murphy (Sydney University)

Sarah Brough (UNSW)

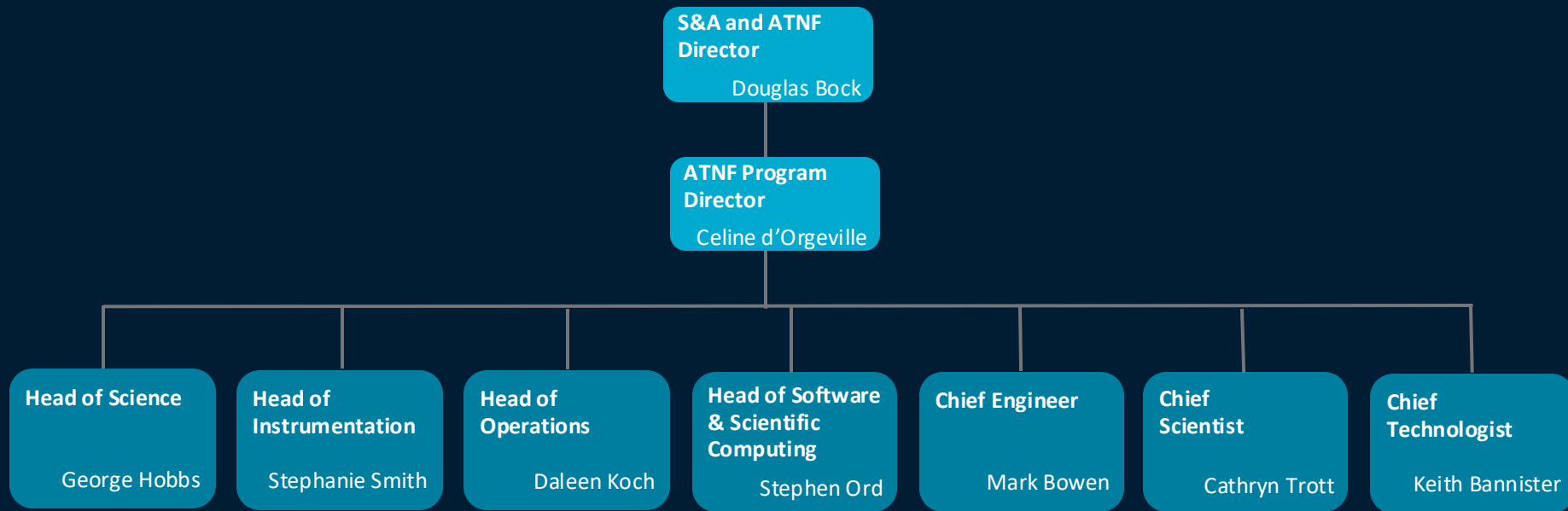
Scott Ransom (NRAO)

Rosie Hicks (ARDC; Australian Stakeholder Community)

<https://www.atnf.csiro.au/about-atnf/governance/steering/>



ATNF Leadership Team

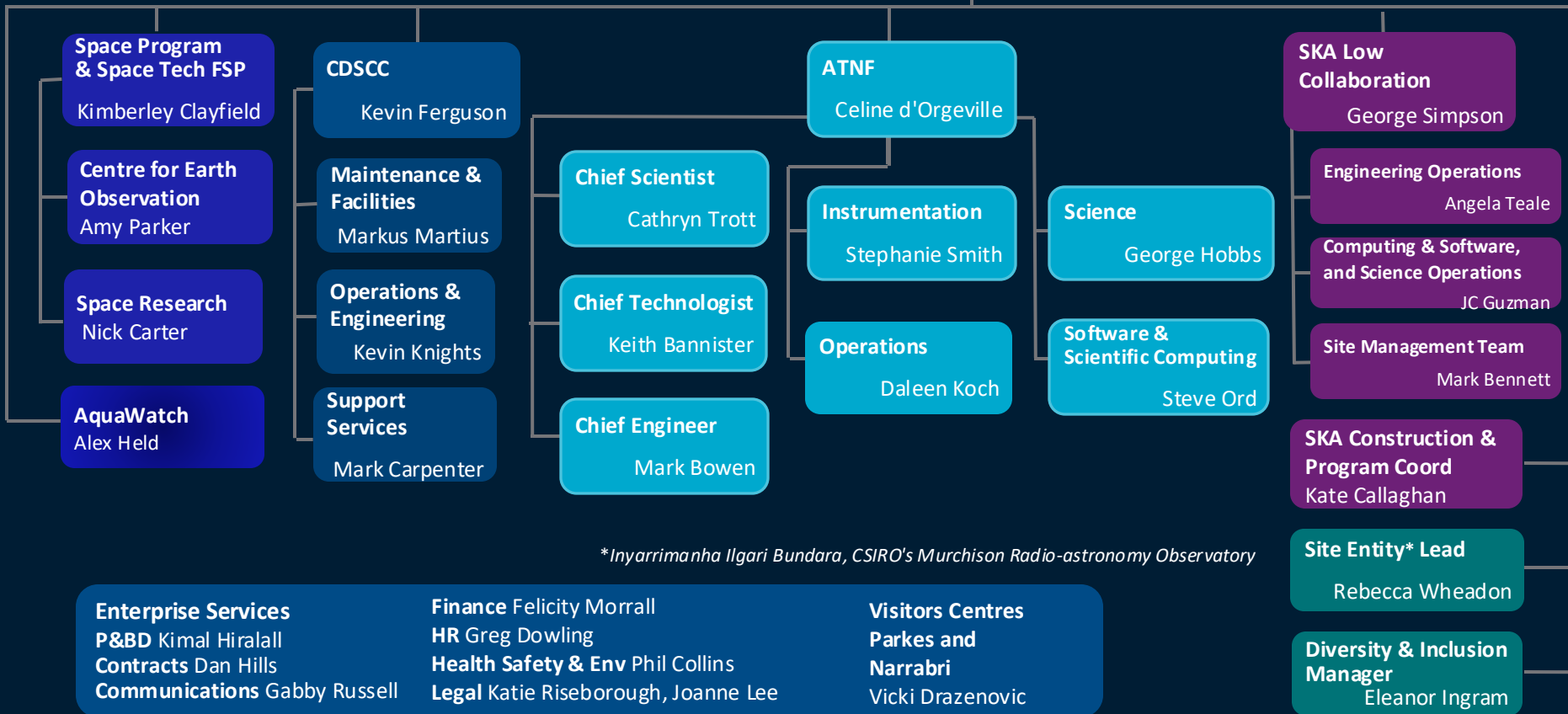




Space & Astronomy

Director: Douglas Bock
Science / Deputy Director: Mark Cheung
Chief Operating Officer: Kate Callaghan

March 2025







Roles and Responsibilities

ATNF Program Director	Holds overall responsibility for the ATNF's day-to-day operations, and leads the ATNF to develop and manage projects which continue our outstanding record in radio astronomy research and innovation.
Head of Operations	Responsible for the operational excellence of the ATNF telescopes and associated activities.
Head of Science	Focuses on continuing science excellence across our facilities and supporting our user community.
Head of Instrumentation	Focuses on operating and improving telescope instrumentation and technologies.
Head of Software & Scientific Computing	Leads a portfolio of software and computing projects and engages with the global astronomy community on our capability in scientific software and computing.
Chief Engineer	Focuses on delivery of our major instrumentation projects and external contracts, and has responsibility for our standards in project management, engineering design and configuration control.
Chief Scientist	Sets the direction for our astrophysics research. Responsible for developing the research capability strategy and leads engagement with the global astronomy community.
Chief Technologist	Sets the strategy for technology development and oversees a portfolio of future-focused technology development projects.

Community engagement

- Accessibility upgrades to the Parkes Observatory Visitors Centre assisting full participation in the space
- Linked to this ATUC meeting
 - ATCA Science Day (8th April 2025)
 - Graduate Student Symposium (10th April 2025)



BIGCAT update

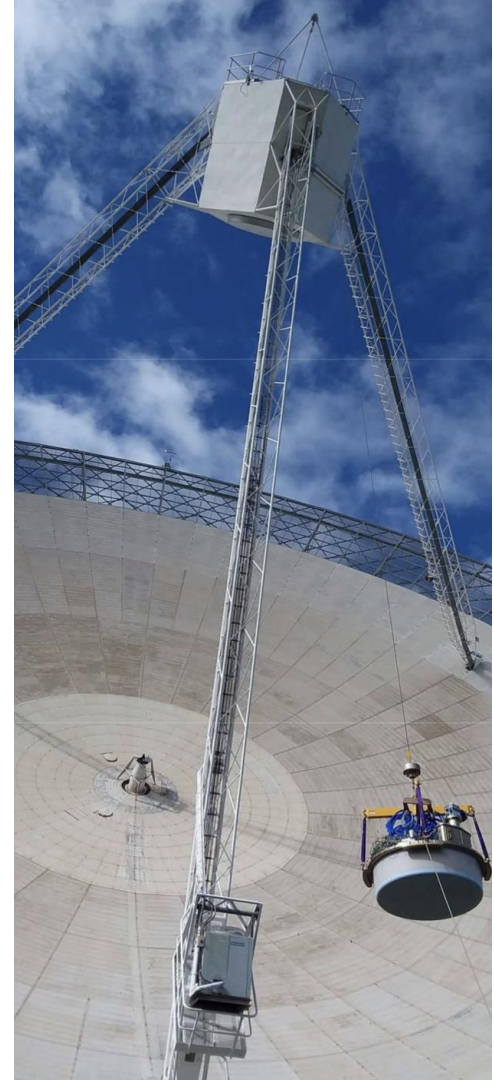
- BIGCAT installation has commenced and testing is currently underway
- Fringes measured between all six antennas
- It has required a large team effort to get to this stage including multiple teams across the ATNF
- Details will be presented in Chris Phillips' talk





CryoPAF update

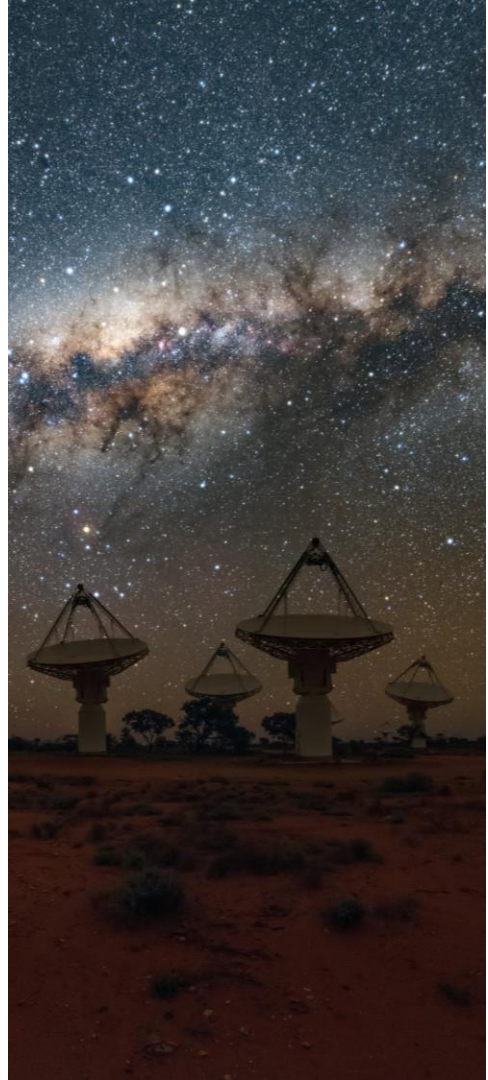
- The CryoPAF is in the Murriyang focus cabin
- Spectral line, continuum and pulsar modes are operational
- Work continues on getting the system to push-button operation
- A huge thanks to the CryoPAF team
- Details will be presented in Simon Johnston's talk





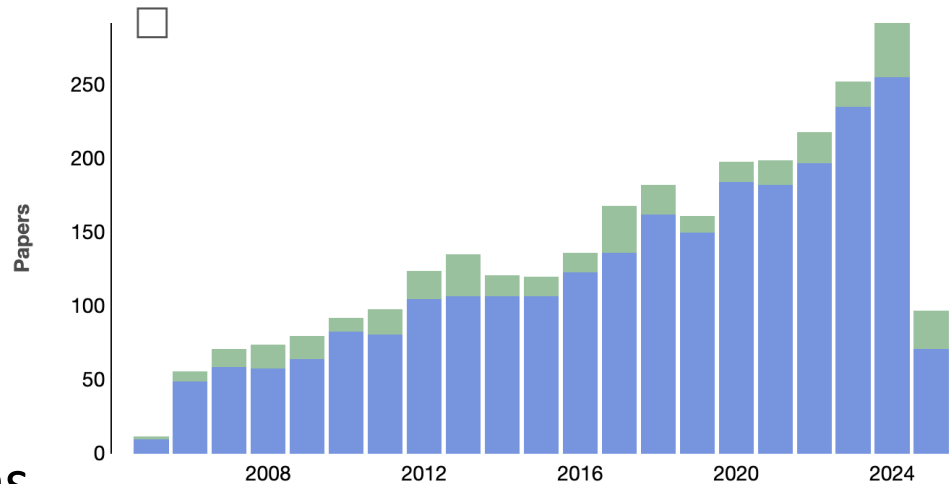
ASKAP update

- Since November 2024 the entire end-to-end system has been working well
- Several new processing pipeline features are in the final stages of testing and deployment
- Prototype 3rd generation PAF mechanical design analysis is underway
- Details will be presented in various talks by:
 - Aidan Hotan, Vanessa Moss, Minh Huynh, Matthew Whiting, Andrew Zic, Tim Galvin



20 years of the ATNF Pulsar Catalogue

- PSRCAT paper published in April 2005, led by Dick Manchester
- Usage continuing to grow
- Lawrence Toomey and Agastya Kapur implementing and supporting version 2 of the catalogue.
- Used in online observing systems, pipelines and for pulsar studies world-wide.



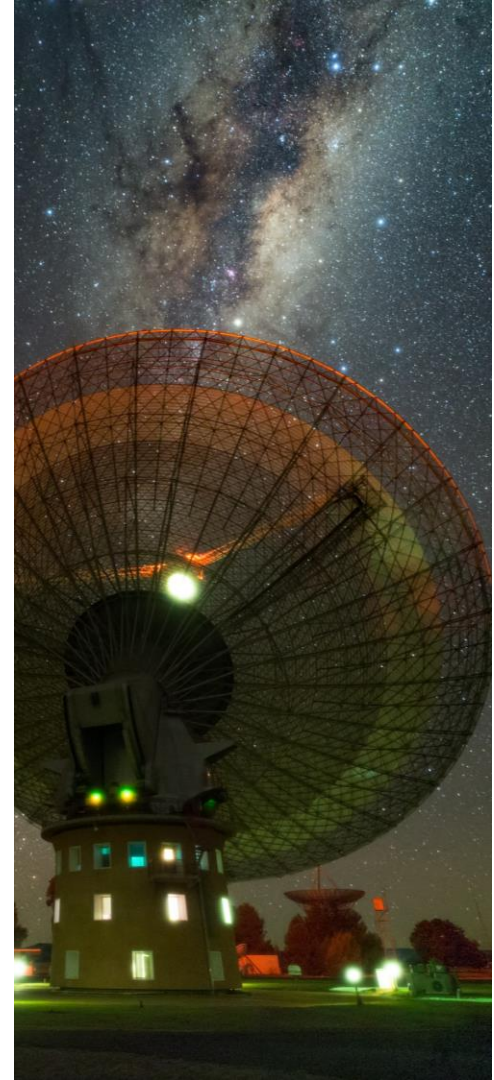
Number of citations to the pulsar catalogue paper as a function of year



Funding our facilities into the future

Vision

- Technology and instrumentation for future radio astronomy
- ASKAP surveys and explore upgrade pathways
- Operate Murriyang with substantial external revenue
- Transition ATCA to new roles and funding streams
- Enable SKA-Low: Construction, operations, site, future of VLBI





Funding our facilities into the future

Situation

- CSIRO funding has not kept up with cost increases
- We added ASKAP (\$1.25m p.a. new funding from NCRIS/AAL)
- Retargeted some other CSIRO funding but some is shorter term
- Significant gap from 2027/28
- Murriyang now has substantial external funding

Challenge

- ATCA operating cost is \$4m/yr and we'll need to find the majority of this on the 2027/28 timescale
- We are exploring possible options, but we request support from and engagement by our user community in identifying possible revenue streams.





Thank You

Margaret Whitehurst
Rapid ASKAP Continuum Survey (RACS)
2019, detail

Space & Astronomy

Douglas Bock
ATNF Director

douglas.bock@csiro.au

Celine d'Orgeville
ATNF Program Director

celine.dorgeville@csiro.au

Australia's National Science Agency

