



CAST

Centre for Antarctic and Southern Ocean Technology

Antarctic and Southern Ocean Technology Conference

28 August 2024

MORNING SESSION (9am-12pm) – Lecture Theatre (Room 145)

9:00am - 9:05am	Introduction - Delphine Lannuzel (UTAS)
9:05am - 9:15am	Welcome Address - CAST Chair - Phillip Boxall (AAD)
9:15am - 10:30am	Updates: 5x 15min talks
	1) AAP Science Decadal plan - David Souter (AAD) 2) Updates on Nuyina Commissioning, & Interoperability between ships - Imojen Pearce (AAD) 3) Southern Ocean Research Aquaria – UTAS/AAD shared facility - Steve Whiteside (AAD) 4) RV Investigator mid-life refit - Andrew Martini (CSIRO) 5) V-Bat - Long Range/Long Endurance UAS - Andrew Crowe (TOLL Aviation)
10:30am - 11am	Morning Tea Break – Room 126B
11am - 12pm	Case Studies and Success Stories: 4x 15min talks
	6) Acquisition to Analytics - New innovations for marine imagery - Vanessa Lucieer (UTAS) 7) Outcome from recent Seaglider mission - Bea Pena-Molino (CSIRO) 8) Animal borne sensors: an essential tool for modern oceanography - Clive McMahon (AIMS/UTAS) 9) Explorer AUV and payload - Peter King (UTAS)
12:00pm - 1:00pm	Lunch – Room 126 B (Note: early start 12:30pm for Nuyina Tour #1)

AFTERNOON SESSIONS (1pm - 4:45pm)

SEE REVERSE FOR INFORMATION ON REGISTERING FOR AFTERNOON SESSIONS

<i>Please note start times:</i>	NUYINA TOUR #1	PARALLEL SESSIONS – TECHNICAL WORKSHOPS (1:00pm - 2:10pm)	
12:30 Nuyina #1	Nuyina Tour 1 (Group #1) 12:30pm - 2:10pm	Technical workshop 1: Gliders & AUV Co-Chair: Pat Lewis (AAD) Co-Chair: Rob Gregor (CSIRO) Room 145 –Lecture Theatre	Technical workshop 2: Data Co-Chair: Rob Jennings (AAD) Co-Chair: Katherine Tattersall (CSIRO) Room 211
1:00 Workshops			
2:10 -2:30pm	Afternoon Tea - Room 126B		
<i>Please note start times:</i>	NUYINA TOUR #2	PARALLEL SESSIONS – TECHNICAL WORKSHOPS (2:45pm - 4pm)	
2:30 Nuyina #2	Nuyina Tour 2 (Group #2) 2:30pm - 4:10pm	Technical workshop 3: Drones Co-Chair: Darren Turner (UTAS) Co-Chair: Brett Chatwood (AAD) Room 145 – Lecture Theatre	Technical workshop 4: Deep ROV Co-Chair: Brett Muir (CSIRO) Co-Chair: Vanessa Lucieer (UTAS) Room 211
2:45 Workshops			
4:10pm - 4:40pm	Summary of Technical Workshops - Lecture Theatre (Room 145)		
4:40-4:45pm	Closing Address - CAST Chair - Phillip Boxall (AAD)		

Registration is required for afternoon sessions. Please use QR code or [link](#) to sign up.



Numbers are limited. Registrations close 19 August 2024.

AFTERNOON SESSION 1

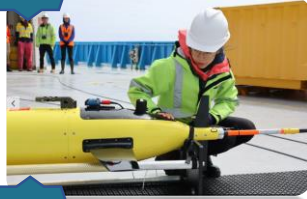


OR

Nuyina Tour #1

12:30pm – 2:10pm, Meet at the Registration Desk

Discover the remarkable RSV Nuyina, Australia's premier icebreaker and the vital link to our Antarctic and sub-Antarctic research stations. Join us on a tour of the ship to explore its various sections and take a deck-by-deck look at the advanced science systems that make ground-breaking research possible in some of the harshest conditions on Earth.



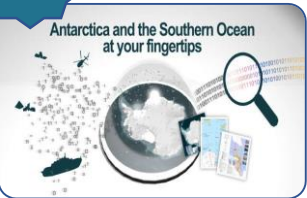
OR

Gliders & AUV Workshop

Co-Chair: Pat Lewis (AAD) Co-Chair: Rob Gregor (CSIRO)

1:00pm – 2:10pm, Room 145 Lecture Theatre

This workshop discusses Southern Ocean applications for ocean gliders and other maritime autonomous technology, to identify technological challenges and opportunities, and to explore how the CAST community can collaborate to develop our future autonomous capability. The goal of the workshop is to make new connections, explore new ideas and start sketching out a roadmap for future CAST projects and collaborations.



Data Workshop

Co-Chair: Rob Jennings (AAD) Co-Chair: Katherine Tattersall (CSIRO)

1:00pm – 2:10pm, Room 211

At this workshop we delve into improving access to shared data collections, delivering data collections in an integrated and interoperable manner and identifying best practices for Antarctic and Southern Ocean data management and data technologies. In 75 minutes we will briefly present current state, share an AADC/UTAS AI metadata generation project, and open the floor for your suggestions and discussion.

AFTERNOON SESSION 2



OR

Nuyina Tour #2

2:30pm – 4:10pm Meet at the Registration Desk

Discover the remarkable RSV Nuyina, Australia's premier icebreaker and the vital link to our Antarctic and sub-Antarctic research stations. Join us on a tour of the ship to explore its various sections and take a deck-by-deck look at the advanced science systems that make ground-breaking research possible in some of the harshest conditions on Earth.



OR

Deep ROV Workshop

Co-Chair: Brett Muir (CSIRO) Co-Chair: Vanessa Lucieer (UTAS)

2:45pm – 4:10pm, Room 211

Join us as we discuss the who, what, how, when, and why behind the plan to procure a deep-water remotely operated vehicle (ROV). This workshop will explore strategies for acquisition, discuss trade-off between vehicle capabilities versus achievability, anticipate the challenges ahead, and clarify the existing support mechanisms for data exchange, classification, access, and automatic reporting.

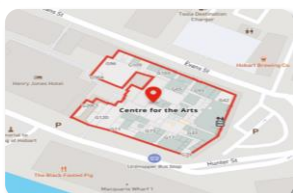


Drones Workshop

Co-Chair: Darren Turner (UTAS) Co-Chair: Brett Chatwood (AAD)

2:45pm – 4:10pm, Room 145 Lecture Theatre

This workshop will discuss the current UAS activities being undertaken at each organisation and in Antarctica by other programs and any issues affecting these (technical, regulatory etc). Discussions will include future evolution of the UAS capability for Southern Ocean and Antarctic Research and identify shared opportunities, challenges and areas of potential collaboration.



Conference Location

[University of Tasmania](http://www.universityoftasmania.edu.au)

[Centre for the Arts, Hunter Street Hobart](http://www.universityoftasmania.edu.au)