

25 – 28 JULY 2023

Day 1 – Tuesday, 25 July 2023	
0800	Registration Desk Opens <i>Tea and Coffee Service available</i>
0900	Indigenous Voices Workshop <i>Sandy Morrison (ASP Steering Group Member and Kāhui Māori Co Lead)</i>
1030	<i>Morning Tea</i>
1100	Gender Equity and Inclusion Workshop <i>Leonie Suter (Australian Antarctic Division), and Elyse Gagnon (Antarctica New Zealand)</i>
1230	<i>Lunch</i>
1330	Technology and Innovation Workshop <i>Wolfgang Rack (University of Canterbury), Kurt Jansen (Orbica), and Mark Rocket (Kea Aerospace)</i>
1500	<i>Afternoon Tea</i>
1530	Early Career Researchers Workshop <i>Nicole Webster (Australian Antarctic Division), Jordy Hendriks (Antarctica New Zealand), Tanya O'Neill (Australian Antarctic Division), and Natasha Gardiner (Antarctica New Zealand)</i>
1700	<i>End</i>
1800	Early Career Researcher Event <i>(Invitation Only – Botanic on Oxford Terrace)</i>

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Day 2 – Wednesday, 26 July 2023	
0730	Registration Desk Opens <i>Tea and Coffee Service available</i>
0830	Mihi Whakatau <i>Corban Te Aika, Ngāi Tūāhuriri</i>
0930	Keynote Speaker <i>Neil Gilbert - Board of Directors, Antarctica New Zealand</i>
1000	Keynote Speaker <i>Steven Chown - Biological Sciences, Monash University</i>
1030	Morning Tea
1100	Human Connections and Impacts I <i>(Opening and Talks)</i> <i>Session Chair - Tanya O'Neill, University of Waikato</i>
1115	Ceisha Poirot - Antarctica New Zealand A New Zealand Antarctic Environmental Assessment: a staged approach
1130	Tim Spedding – Australian Antarctic Division A Cleaner Antarctica – Comprehensive Contaminated Site Assessments and Remediation design for Australia's Antarctic and sub-Antarctic stations
1145	Madison Farrant – University of Waikato The role of glacial meltwater streams in the transfer of contaminants from penguin colonies to the Southern Ocean
1200	Bianca Sfiligoi – Australian Antarctic Division Environmental remediation and research addressing fuel spills and improved environmental protection at Casey Station, Antarctica
1215	Natasha Gardiner – University of Canterbury Stakeholder perspectives on science-policy knowledge exchange practices in the Antarctic context
1230	Indi Hodgson-Johnston – Australian Centre for Excellence in Antarctic Science Where does the science go? Tracing and understanding the uptake of scientific publications into policy-related forums
1245	Lunch <i>Australian Antarctic Division (AAD) Lunch Session (1300 – 1330)</i>
1345	Human Connections and Impacts II <i>Session Chair – Damien Stringer, Australian Antarctic Division</i>
1345	Thomas Lord – Gateway Antarctica, University of Canterbury Constructing Antarctic Security: An analysis of Antarctic security discourses
1400	Hanne Nielsen – Institute for Marine and Antarctic Studies, UTAS Perceptions of Citizen Science in the Antarctic
1415	Elizabeth Leane – University of Tasmania Public Awareness of Australia's Activities in Antarctica: Results from Recent National Surveys
1430	Ursula Rack – University of Canterbury Operation Deep Freeze I – how the USA used arts to create their narrative in the Antarctic
1445	Holly Winton, Ayla Hoeta – Victoria University of Wellington Maramataka ki te Tiri o Te Moana: What could a Maramataka of Antarctica look like?
1500	Gabriela Roldan – Antarctic Heritage Trust Step inside Sir Ed Hillary's Hut in Antarctica: bringing Antarctic cultural heritage to the public through Virtual Reality
1515	Afternoon Tea

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Day 2 Continued – Wednesday, 26 July 2023	
1545	Atmosphere, Weather and Climate <i>(Opening and Talks)</i> <i>Session Chair – Liz Keller, GNS</i>
1600	Eva Bendix Nielsen – University of Canterbury Extreme temperature events for the past 19 years in the Ross Sea Region, Antarctica
1615	Yaowen Zheng – Antarctic Research Centre, Victoria University of Wellington Statistically parameterizing and evaluating a positive degree-day model to estimate surface melt in Antarctica from 1979 to 2022
1630	Tamara Pletzer – University of Otago Simulating spatial variability in streamflow using a distributed hydrometeorological model in the McMurdo Dry Valleys
1645	Jocelyn Turnbull – GNS Science Latitudinal Distribution of Atmospheric Radiocarbon over the Southern Ocean
1700	Philipp Sueltrup – Kea Aerospace Observing Antarctica from the Stratosphere - Identifying Future Opportunities
1730	Icebreaker – Poster Session Event <i>(Majestic – Conference Venue)</i>
1930	<i>End</i>

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Day 3 – Thursday, 27 July 2023	
0800	Registration Desk Opens <i>Tea and Coffee Service available</i>
0830	<i>Announcements</i>
0845	Data and Instrumentation <i>(Opening and Talks)</i> <i>Session Chair – Aleks Terauds, Australian Antarctic Division</i>
0900	Simon Cox – GNS Science A continent-wide detailed geological map dataset of Antarctica
0915	Johan Barthelemy – NVIDIA Development of an AIoT platform for long term and near real-time monitoring of remote environments in Antarctica
0930	Erik Behrens – NIWA Tropical teleconnections through the Amundsen Sea Low impact Antarctic toothfish recruitment
0945	Rob King – Australian Antarctic Division RSV Nuyina's Wet Well Sampling System
1000	Clive McMahon – Sydney Institute of Marine Science Seals mapping the East Antarctic continental shelf
1015	Anna MacDonald – Australian Antarctic Division Best practice guidelines for eDNA biomonitoring in Australia and New Zealand
1030	Stephen Craig Cary – University of Waikato Hauwai 20: An autonomous biosampler for year-round, under-sea ice biological collection and physical measurements in the Antarctic
1045	Morning Tea
1115	Ice and Earth System Dynamics I <i>(Opening and Talks)</i> <i>Session Chair – Nancy Bertler, Antarctic Science Platform</i>
1130	Tim Naish – Victoria University of Wellington The Uncertain Future of Antarctica's Melting Ice: A New Research Initiative
1145	Elizabeth Keller – GNS Science Sensitivity of climate and ocean circulation to West Antarctic Ice Sheet extent in past interglacials
1200	Tessa Vance – Australian Antarctic Program Partnership, Institute for Marine and Antarctic Studies, University of Tasmania Implications of varied Pacific decadal variability over the last 2000 years to Australian and New Zealand climate risk
1215	Daniel Lowry – GNS Science What caused Late Holocene advance of the West Antarctic Ice Sheet at the Siple Coast?
1230	Matt King – Australian Centre for Excellence in Antarctic Science (ACEAS), University of Tasmania Climate variability as a major forcing of recent Antarctic ice-mass change
1245	Lunch <i>Antarctic Science Platform (ASP) Lunch Session (1300 - 1330)</i>

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Day 3 Continued – Thursday, 27 July 2023	
1345	Ice and Earth System Dynamics II <i>Session Chair – Gary Wilson, GNS</i>
1345	Robert McKay – Victoria University of Wellington West Antarctic Ice Sheet history from International Ocean Discovery Program (IODP) Expedition 374 geological drilling in the Ross Sea
1400	Frank Mackenzie – Victoria University of Wellington Modelled ocean and atmosphere feedbacks associated with the West Antarctic ice sheet during the last interglacial period
1415	Kathryn Gunn – CSIRO Environment Oceanic ridges impact the strength and location of deep ocean warming and sea level change
1430	Matt Tankersley – Antarctic Research Centre Addressing bathymetry uncertainty beneath the Ross Ice Shelf
1445	Maren Elisabeth Richter – University of Otago Interannual variability of fast-ice thickness in McMurdo Sound: drivers and trends
1500	Ryan North – University of Wollongong Magnitude and rate of ice loss from debuttressed glaciers on the Antarctic Peninsula since the pre-satellite era
1515	<i>Afternoon Tea</i>
1545	Ice and Earth System Dynamics III <i>Session Chair – Tim Naish, Victoria University of Wellington</i>
1545	Gary Wilson – GNS Science Permafrost degassing in Taylor Valley, Antarctica
1600	Nancy Bertler – Antarctic Research Centre, Victoria University of Wellington and GNS Science Early onset of the Antarctic Cold Reversal in the Ross Sea region – Potential Drivers and Implications
1615	Shelley MacDonell – Lincoln University and University of Canterbury Hydrological system controls on the Müller Ice Shelf, Antarctic Peninsula
1630	David Prior – University of Otago Kinematics and dynamics of the lateral shear margin of the Priestley Glacier: implications for understanding ice sheets
1645	Andrew Gorman – University of Otago Speeding up seismic reflection surveying of the seafloor below the Ross Ice Shelf with a towed streamer and surface detonations
1700	<i>Announcements</i>
1830	Conference Dinner <i>(Ticketed Event)</i> Christchurch Art Gallery Te Puna o Waiwhetū, <i>Corner Worcester Boulevard and Montreal Street</i>
2200	<i>End</i>

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Day 4 – Friday, 28 July 2023	
0800	Registration Desk Opens <i>Tea and Coffee Service available</i>
0830	<i>Announcements</i>
0845	Sea-Ice Interactions <i>(Opening and Talks)</i> <i>Session Chair – Tim Spedding, Australian Antarctic Division</i>
0900	Natalie Robinson – NIWA An unprecedented season for sea ice: a view from the ocean
0915	Julia Martin – Antarctic Research Centre, Victoria University of Wellington The Influence of Snow on Antarctic Sea Ice Evolution: Drone-based Mapping of the Snow Surface Temperature
0930	Wolfgang Rack – Gateway Antarctica, University of Canterbury Sea ice thickness in the western Ross Sea and a vision for beyond
0945	Alena Malyarenko – NIWA The Terra Nova Bay Polynya activity in the new coupled modelPolar-SKRIPsv1
1000	Fabien Montiel – University of Otago Does the floe size distribution in the marginal ice zone follow a power law?
1015	Denise Fernandez – NIWA Heat and water mass distributions in the Ross Sea from observations and model simulations
1030	Sarah Thompson – Australian Antarctic Program Partnership The stability of the Denman Ice Shelf System
1045	Morning Tea
1115	Ecosystems in a Changing World I <i>(Opening and Talks)</i> <i>Session Chair – Craig Cary, University of Waikato</i>
1130	Steven Chown – Monash University Securing Antarctica's Environmental Future – Outcomes and Opportunities
1145	Georgia Watson – Securing Antarctica's Environmental Future, University of Wollongong ANTOS Biodiversity Monitoring: the need for standardised protocols for long-term monitoring across Antarctica, a case study from the moss beds of East Antarctica
1200	Alexis Marshall – University of Waikato Illuminating Ross Ice Shelf ecosystem connectivity through the lens of the benthic microbial communities
1215	Gemma Collins – Manaaki Whenua Landcare Research Biogeography and Genetic Diversity of Terrestrial Mites in the Ross Sea Region, Antarctica
1230	Barbara Bollard – University of Wollongong Reviving the Past: A Temporal Analysis of Moss Distribution in Antarctic Specially Protected Areas (ASPAs) through Historical Photographs and Modern Drone Imagery
1245	Lunch <i>Scott Base Redevelopment (SBR) Lunch Session (1300 - 1330)</i>

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Day 4 Continued – Friday, 28 July 2023	
1345	Ecosystems in a Changing World II <i>Session Chair – Michelle La Rue, University of Canterbury</i>
1345	Jacqui Stuart – Cawthron Institute, Victoria University of Wellington A glimpse into the future: Changing Sea Ice Environments and Microalgae Communities in McMurdo Sound, Antarctica.
1400	Emilija Reuter – University of Canterbury Foraging in a Changing Climate: Assessing the Energetic Viability of Adélie Penguin Prey Switching
1415	Melanie Borup – Institute for Marine and Antarctic Studies Effects of temperature on life history of several Antarctic terrestrial bdelloid rotifers and drivers of species distribution
1430	Leonie Suter – Australian Antarctic Division Using environmental DNA (eDNA) for monitoring in the Southern Ocean: understanding limitations and opportunities
1445	Melinda Waterman – University of Wollongong Moss cores as indicators of past Antarctic terrestrial microclimates
1500	Afternoon Tea
1530	Southern Ocean and the Marine Protected Area <i>(Opening and Talks)</i> <i>Session Chair – Barb Hayden, NIWA</i>
1545	Brian Miller – Australian Antarctic Division The Antarctic blues, marine mammals on MARS, and the rise of AI: lessons learned and future directions from nearly two decades of listening to the high-latitude Southern Ocean
1600	Lynda Goldsworthy – Institute for Marine and Antarctic Studies, University of Tasmania Conservation challenges for the Commission for the Conservation of Antarctic Marine Living Resources
1615	Helen Macdonald – The National Institute of Water and Atmospheric Research, New Zealand High-resolution physical-biogeochemical modelling in the Ross Sea
1630	Sally Garrett – Defence Technology Agency, New Zealand Defence Force Science data collection by the New Zealand Defence Force during the 2022 Antarctic Resupply Mission.
1645	Lana Young – NIWA Protecting the Ross Sea MPA: Science and Filmmaking Working Together
1700	Announcements and Closing
1715	Conference End
1900	Antarctica After Dark <i>(Antarctica New Zealand Public Event – Majestic)</i>