

Wednesday 29 November 2023

SESSION	SPEAKER(s)	TITLE	Principal Investigator FORMAT	
RESEARCH THEME : Ecosystems, biodiversity and biodiscovery				
8:00	Biodiversity		CHAIR: Prof Bettine van Vuuren	
	Dr Peter Convey (BAS)	Terrestrial biological invasions and their potential impacts in the maritime Antarctic	Invited Guest	Plenary Talk
8:30	Mammals		CHAIR: Dr Mia Wege	
	Dr Christian Murray	Understanding the drivers of Marion Island's elephant seal population	Prof Nico de Bruyn	Oral
	Leandri de Kock	Considering individual variation when investigating marine predator behaviours during life- history events	Prof Nico de Bruyn	Oral
	Dr Liezl Pretorius & Dr Greg Hofmeyr	Canine morphometrics as a tool for distinguishing species, sex and age in Southern Ocean fur seals	Dr Greg Hofmeyr	Oral
	Dr Mia Wege	The conveyor belt of Ross seals in the Lazarev Sea and their behaviour	Prof Trevor McIntyre	Oral
	Matthew Germishuizen	Sea ice declines coincide with a period of reduced reproductive success in Southern Ocean top predator	Dr Els Vermeulen	Oral
	Oluwaseyi Paul Babalola	Entropy-based Detection and Classification of Bryde's Whale Vocalizations: An Approach for Understanding and Conserving an Endangered Species	Prof Jaco Versfeld	Oral
RESEARCH THEME : Earth systems observations				
9:30	Antarctic and sub-Antarctic earth science		CHAIR: Prof Werner Nel	
	Dr Geoff Grantham	Geological and Geophysical Research in Western Dronning Maud Land, Antarctica. Fieldwork, Laboratory Methods, History and Progress over ~40 years.		Oral
9:45	BREAK			
RESEARCH THEME : Earth systems observations				
10:15	Antarctic and sub-Antarctic earth science		CHAIR: Prof Werner Nel	
	Prof Werner Nel	Landscape and climate interactions in the sub-Antarctic: Past, present and future	Prof W Nel	Oral
	Dr Elizabeth Rudolph	The deglaciation of sub-Antarctic Marion Island	Prof W Nel	Oral
	Mr Sibusiso Sinuka	Towards determining the formation ages of the lithologies on sub-Antarctic Marion Island	Prof W Nel	Oral
	Mr Abuyiselwe Nguna	Preliminary results of fallout 137Caesium techniques on Aeolian land features on sub-Antarctic Marion Island	Prof W Nel	Oral
CROSS DISCIPLINES				
11:15	Capacity Building APECSSA feedback session		CHAIR: Dr Tommy Ryan-Keogh	
11:45	Ecosystems, biodiversity and biodiscovery		CHAIR: Prof Donald Cowan	
	Don Cowan	Microbial ecology of Antarctic desert soils	Prof D Cowan	Oral
	Pedro Lebre	Biogeographic survey of soil microbial communities across Antarctica	Prof D Cowan	Oral
	Silindile Maphosa	Exploring the functional potential of microbial metagenome-assembled genomes (MAGs) from sub-Antarctic islands	Prof D Cowan	Oral
	Lefentse Mashamaite	Microbial diversity in Antarctic Dry Valley soils across an altitudinal gradient	Prof D Cowan	Oral
12:30	LUNCH			

RESEARCH THEME : Ecosystems, biodiversity and biodiscovery

13:30	Ecosystems, biodiversity and biodiscovery	CHAIR: Prof Donald Cowan		
	Runesu Bakasa	Elucidating the role of biosynthetic genes in the adaptation of bacterial mixotrophs in the South Atlantic	Prof T Mkhallyane	Oral
	Marike Hillocks	Phage satellites of the deep Southern Ocean	Prof T Mkhallyane	Oral
	Riaan Pierneef	Polar opposites; bacterioplankton susceptibility and mycoplankton resistance to ocean acidification	Prof T Mkhallyane	Oral
	Mancha Mabaso	Marine microbiome responses to Fe supplementation	Prof T Mkhallyane	Oral
	Choaro Dithugoe	Bacteria and archaea regulate particulate organic matter export in suspended and sinking marine particle fractions	Prof T Mkhallyane	Oral
	Nosipho Hlalukana	Disentangling the biosynthetic potential of the South Atlantic Ocean microbiome	Prof T Mkhallyane	Oral
	Nyasha Mafumo	Disentangling the effects of the Agulhas Current on marine viruses	Prof T Mkhallyane	Oral
	Phillip Mawire	Genomic analysis of Acidobacteria from polar region soils: Delineating the mechanisms leading to diversity and successful adaptation to the polar regions.	Prof T Mkhallyane	Oral
	Mayinbogwe Buthelezi	Investigation of microbial genomics to understand the cycling of organosulfur compounds in the marine environments	Prof T Mkhallyane	Oral
	Sade Magabotha	A reproducible microbiome pipeline for the identification of horizontally acquired mobile genetic elements	Prof T Mkhallyane	Poster
	Christophe Lefebvre	Using computational tools to shed light on microbes with capacity to degrade microplastics in the oceans	Prof D Cowan	Poster
	Elizabe Malan	Understanding the dynamics of microbial communities in the Congo River plume	Prof T Mkhallyane	Poster
	Benjamin Abraham	Nutrient Co Limitation of Bacterial Communities within the Southern Ocean	Prof T Mkhallyane	Poster
	Nelisiwe Hedebe	Charting the diversity of Giant viruses of Antarctic dry valley permafrost	Prof T Mkhallyane	Poster
	Michelle Bekker	Phage diversity in the Southern Ocean	Prof T Mkhallyane	Poster

15:00 BREAK

15:30	The Southern Ocean's sensitivity to a changing climate: insights from a seasonal cycle approach	CHAIR: Dr Sarah Nicholson & Dr Sandy Thomalla		
	Sarah Nicholson	The impact of storms on CO2 and heat exchange across the Southern Ocean	DR S Nicholson	Oral
	Tesha Toolsee	The complex role of storms in modulating intra-seasonal air-sea CO2 fluxes in the sub-Antarctic Southern Ocean	DR S Nicholson	Oral
	Sandy Thomalla	Trends in Southern Ocean Phytoplankton bloom phenology	DR S Thomalla	Oral
	Sifiso Mpapane	Understanding photoacclimation effects on Chl:C ratio in the Southern Ocean: modelling considerations and insights into seasonal assemblage composition	DR S Nicholson	ePoster
	Tommy Ryan-Keogh	Multi-decadal trend of increasing iron stress in the Southern Ocean phytoplankton	DR S Nicholson	Oral
	Thapelo Ramalepe	Exploring the seasonal processes governing manganese supply in the Southern Ocean	DR S Nicholson	Oral
	Thato Mtshali	Winter-time distributions and dissolved iron mixed layer budget in the south Atlantic sector of the Southern Ocean	Dr T Mtshali	Oral
	Miranda Sitofile	Investigating seasonal variability of dissolved iron in the South Atlantic sector of the Southern Ocean: Insights from the winter and spring SCALE 2019 cruises	DR S Thomalla	ePoster
	Lillina Ruiters	Variability of phytoplankton photophysiology in the Southern Ocean: an analysis of assumptions and uncertainties	DR S Thomalla	ePoster

16:30 NETWORK - Building our SANAP Research Community

18:30 DINNER

			Nico de Koker	Inversion and Extreme Value Analysis of Ice Loading on Propulsion Shaft of the SA Agulhas II		Prof A Bekker	
			Micaelwa Melim	Expanding the Capabilities of Mariner 4.0: A human-centred monitoring and research tool		Prof A Bekker	
			Ben Steyn	A Longitudinal Study of the Open-Water Performance of an Ice-Class Vessel		Prof A Bekker	
			Brendon Nickerson	Inverse calculations of ice impacts on propulsion machinery		Prof A Bekker	
			Nicole Taylor	The berth of Mariner 4.0: A human-centred monitoring and research tool		Prof A Bekker	
			Jukka Tuhkuri	Ice Load measurement and ice condition monitoring onboard S.A. Agulhas II		Invited Guest	
			Miko Lensu	Sea ice research of Finnish Meteorological Institute		Invited Guest	
			Sarah Nicholson	South African Robotics and Ocean Technology Innovation Centre (SA-RobOTIC)		Dr Sarah Nicholson	

21:00 **NETWORK - Building our SANAP Research Community**