



Workshop on the Southern Ocean



This workshop aims at bringing together physical oceanographers from both the observational and modelling communities, to share their latest work on the Southern Ocean and discuss their future projects in order to create new scientific synergies both at the Swedish and at the international level.

When: 9-10 October 2017

Where: Department of Meteorology (MISU), Room C609

Organizer: Fabien Roquet (MISU)

Sponsored by the Bolin Center RA1

Monday, October 9

10h00 Coffee and welcome

10h30 David Marshall (Oxford). *Eddy saturation of the Antarctic Circumpolar Current*

11h00 Sebastiaan Swart (UGOT). *Fine scale upper ocean processes in the Southern Ocean*

11h30 David Ferreira (Reading). *Southern Ocean eddies in eddy-permitting and eddy-resolving models*

12h00 Agatha De Boer (SU). *Bottom topography control on the ACC transport*

12h30 Lunch

14h00 Gurvan Madec (LOCEAN). *Abyssal overturning circulation shaped by basin geometry*

14h30 Maxim Nikurashin (UTAS). *Eddy-mean flow decomposition for lee wave generation in the SO*

15h00 Louise Biddle (UGOT). *Using seal tag data to characterize mixed layer regimes in the Marginal Ice Zone*

15h30 Coffee break

16h00 Karen Assmann (UGOT). *Shelf break exchange and thermocline variability in the Amundsen Sea*

16h30 Kristofer Döös (MISU). *The atmospheric water circulation as an extension of the oceanic overturning*

17h00 Casimir de Lavergne (UNSW). *Antarctic sea ice trends sustained by vertical ocean heat redistribution*

20h00 Dinner at Giro Pizzeria (<http://www.giropizzeria.com/>)

Tuesday, October 10

08h30 Jean-Baptiste Sallée (LOCEAN). *How the ACC and Surface Buoyancy Fluxes shape the SO overturning*

09h00 Karen Heywood (UEA). *Processes on the Antarctic continental shelf: what we know, what we don't know*

09h30 Liam Brannigan (MISU). *Stratification control below sea ice by cabbeling*

10h00 Coffee break

10h30 Etienne Pauthenet (MISU). *Seasonal meandering of the Polar Front upstream of the Kerguelen Plateau*

11h00 Carsten Eden (Hamburg). *Southern Ocean dynamics and diapycnal mixing*

11h30 Marcel Du Plessis (Cape Town). *Submesoscale instabilities enhance variability of the SO mixed layer*

12h00 Andy Thompson (CalTEC). *The dynamics of the SO across transitions in the global overturning circulation*

12h30 Lunch

14h00 Lia Siegelmann (Brest). *Sub-mesoscales and internal gravity waves revealed by Southern Elephant Seals*

14h30 David Hutchinson (SU). *The Southern Ocean circulation during the Eocene-Oligocene Climate Transition*

15h00 Trevor McDougall (UNSW). *What is the direction of lateral mixing in the ocean?*

15h30 Open Discussion

16h00 Closing of workshop