

Session on South African Marine Science

2:00-4:30 p.m., 5 September 2017

Opening Sandy Thomalla - *In memory of Prof Mike Lucas (10 min)*

Session I

Pedro Monteiro - *SOCCO as a systems programme and the SOSCEX robotics based methodology (10 min)*

Luke Gregor - *Is the Southern Ocean CO₂ sink weakening once again? (5 min)*

Precious Mongwe - *Diagnosing Southern Ocean air-sea CO₂ biases in Earth Systems Models models (5 min)*

Sarah Nicholson - *Why Southern Ocean storms matter to biogeochemistry? (5 min)*

Marcel du Plessis - *The importance of submesoscale fluxes in the Southern Ocean: insight from the multi-year SOSCEX Seaglider Expeditions (5 min)*

Sarah Fawcett - *Past and present ocean productivity through the lens of the nitrogen isotopes (10 min)*

Warren Joubert – *Sensitivity of net community productivity estimated from O₂/Ar ratios to light availability within the surface mixed layer (10 min)*

Coffee Break

Session II

Alakandra Roychoudhury - *GEOTRACES South Africa: An overview (10 min)*

Johan Viljoen - *Southern Ocean phytoplankton pigments, distribution and adaptations to trace metals (5 min)*

Mhlangabezi Mduyana - *A seasonal comparison of nitrogen uptake and nitrification in the South Atlantic Southern Ocean (5 min)*

Jessica Burger – *Winter-time rates of total, new and regenerated production in the southern Benguela upwelling system (5 min)*

Ruan Parrott - *Organic carbon export and phytoplankton community composition across the Agulhas System Climate Array (5 min)*

Neil Malan and SAEON students - *Modelling activities in the Agulhas System, from coastal interactions to source regions (10 min)*

Tammy Morris - *Lagrangian evolution of Madagascar cyclonic eddies from two dedicated Argo floats experiments (5 min)*

Katye Altieri - *Nitrogen cycling in the remote marine atmosphere: Implications for biogeochemical cycling and climate (10 min)*

Ismael Kanguuehi - *Sediment trace metal concentration and dissolution from known dust emitting regions in southern Africa- How southern African dust plumes are fertilizing proximal oceans (5 min)*

Isabelle Ansorge - *SEAmester-South Africa's Class Afloat (10 min)*