## **SAEON Seminar Series**



South African Environmental Observation Network

## Describing the Agulhas Bank annual cycle using in-situ observations

## Thursday 30 March 2023 @ 2pm



## **Register here!**

Philile Mvula PhD student - SAEON Egagasini Node

Over the 40+ years that South Africa has conducted offshore expeditions, a lot of work has been done on the Agulhas Bank. The Agulhas Bank is a broad, shallow part of the South African continental shelf south of Port Elizabeth, it encompasses the shelf and coastal regions. The Agulhas Bank supports a large diversity of commercially valuable fish ranging from pelagic to demersal. Its annual cycle is characterised by a series of physical and biogeochemical processes that have important implications for regional and global ocean circulation, climate variability, and ecosystem productivity. During an offshore expedition in 2016, a rocky ridge was found in the Eastern Agulhas Bank. The ridge is found approximately ~40km offshore of Cape St Francis in a fishing area named chalk line grounds, where kingklip has been trawled for decades hence why it is termed the Kingklip Ridge. For our research based on characterising the environment around the kingklip ridge, we set out to first answer the question: - Can we create an annual cycle of the oceanographic environment around the Agulhas Bank with the in-situ data that has been collected to date? To answer this question, we used in-situ data collected between 1990 and 2020 from various monitoring programs to characterize the annual cycle of the Agulhas Bank. Our analysis focused on temperature, chlorophyll-a, and current velocity data from ship-based measurements.