Sectie Energie en Klimaat van de NNV

## nederlandse



natuurkundige vereniging

## Symposium 'Climate, seas and oceans' Current status and latest developments in modeling, observations and processes

## Locatie: DIFFER, Eindhoven Vrijdag 9 september 2022

## New Observation Vessels for Sea-Going Expeditions, Observations and Paleoclimatology

Gert-Jan Reichart (NIOZ/UU)

The Ocean plays a key role in Earths' climate, storing  $CO_2$  and heat, with ocean circulation having large impacts on the redistribution of this heat. Today the oceanic environment is changing rapidly as a result of external pressures, affecting the diverse but little characterized organisms playing an important role in marine food chains and the ocean's carbon cycle. Therefore, it of crucial importance that marine researchers are able to contribute to the characterization and understanding of our changing ocean environment, its various biotic and abiotic components, both today and through its geological history. This requires state-of-the-art marine research platforms and sensors to generate the data which is essential for our understanding of Earth's future. Royal NIOZ is coordinating the efforts of the Dutch marine research community to develop and build the ships and tools needed, of which I will give an overview, as well as the parameters and processes we aim to constrain.