

Experimental Oceanography

Principal investigator: Eleanor Frajka-Williams

Universität Hamburg, Institut für Meereskunde (Universität Hamburg project)

The working group aims to advance our understanding of ocean dynamics and circulation in a changing climate. We are a seagoing group, specialising in physical oceanographic measurements and using approaches that leverage traditional observations with new platforms and satellite data. We use a range of observational platforms which enables us to address problems spanning scales (from micro- to large-scale), and spanning spheres (from the ocean to biogeosphere, cryosphere and atmosphere). While observations are our primary tool for addressing scientific questions, ocean observations are limited in space and time. This working group also uses output from numerical models to, for example, assess the model's fidelity against ocean observations, to inform the design of ocean observing systems, and to evaluate processes and their physical manifestation in numerical simulations as compared to ocean observations.