



## Einladung zum Vortrag im Rahmen des gemeinsamen Kolloquiums des Instituts für Biologie und Umweltwissenschaften und des Departments für Neurowissenschaften

## Prof. Dr. Michael Kleyer

Institute of Biology and Environmental Sciences, University Oldenburg, Germany

## Plant trait responses to the environment and effects on ecosystem properties and services: An application to coastal landscapes

I will present a short overview on plant traits, their correlations and aggregation to trait modules. I will show how vegetation-related ecosystem functions and services can be predicted from trait modules of plant communities. The results will be applied to an investigation of four land management scenarios aiming at adapting to climate change and sea level rise in coastal landscapes. I will introduce the chain of models to quantify and evaluate the performance of multiple ecosystem functions and services in each scenario for the next 100 years, in response to climate change and projections of sea level rise. Modelling in this study included process-based hydrological models and statistical species distributions models. The provisioning, regulatory and cultural ecosystem services based on the traits of the predicted species varied greatly in response to the management scenarios that can be broadly categorized as either hold the coastline or retreat of the coastline.

15.12.2020, 16 Uhr s.t. virtual room: https://meeting.uol.de/b/gab-t5m-nmo-kvi

Gastgebend: Prof. Dr. Gabriele Gerlach (AG Biodiversität und Evolution der Tiere), IBU

Gäste aller Institute sind herzlich willkommen