

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

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The Ostplate of Spiekeroog – Evolution and hydrology of a young barrier island

Barrier islands form by the interplay of wind, swell and ocean currents. Their hydrology is shaped by climate, seasonal and tidal flooding events and the infiltration of rainwater into permeable dunes, forming so-called freshwater lenses. These freshwater lenses are relevant as drinking water resources and likewise important for both terrestrial and coastal ecosystems. The North Sea island of Spiekeroog is a fascinating natural laboratory to study the hydrology of barrier islands in front of our doorstep: over the past century its eastern half, the “Ostplate”, has evolved from a small sandbank into a vast and highly protected landscape of sand dunes and salt marshes while the western part of Spiekeroog gives insights into the functioning of a more mature freshwater lens. In my talk, I will give an overview into our groups’ coastal hydro(geo)logical research, starting with the formation of freshwater reservoirs and the effect of inundation frequency and storm floods on groundwater salinities and vegetation on the Ostplate, flow patterns and hydrochemistry within the main freshwater lens of Spiekeroog and finally submarine groundwater discharge into the coastal sea at the beach.

24.11.2020, 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