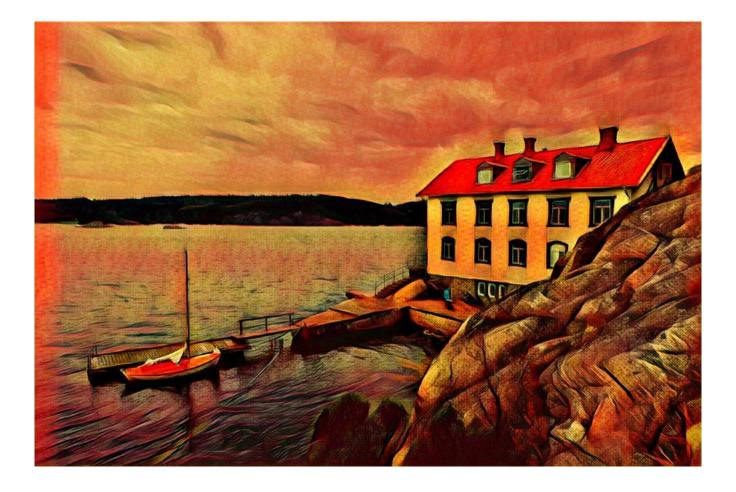
# Bornö Summer School 2022

### The tropical mixed layer – real and simulated

Where: Bornö Marine Research Station (58°22'48"N 11°34'48"E)

When: July 31th – August 6<sup>th</sup> 2022



### AWI, Geomar, MPI & NBI

(sponsored by NextGEMS)

# Bornö Summer School 2022

#### J1 – Sunday July 31<sup>th</sup>, 2022

Travelling to Stora Bornö.

#### J2 – Monday August 1<sup>th</sup>, 2022

**9am-noon** Tropical Ocean circulation theory and numerical representation of the mixed layer (Markus)

**all afternoons:** developing the mixed layer heat budget and compare it with obs., including a ERA5 calibration with PIRATA

#### J3 – Tuesday August 2th, 2022

**9am-noon:** The observational basis Marcus: observing turbulent mixing Rebecca: impact of mixing on the mixed layer heat budget & NIW induced mixing Florian: NIW – mesoscale interaction & diurnal cycle

#### J4 – Wednesday August 3<sup>th</sup>, 2022

**9am-noon:** Comparison of ICONo, FESOM, Veros with observations: mean currents, stratification, forcing & processes Johann: ICON means Aleksey: FESOM means Marta: inertial waves Mia: TIWs and subTIWs Mira: diurnal warm layers and thin model layers Swantje: deep cycle turbulence

#### J5 – Thursday August 4<sup>th</sup>, 2022

#### **9am to noon:** Sergey: pros & cons of the ICON and FESOM discretizations, and FESOM updates Markus: Ocean modelling with GPU acceleration in Python Jan: Sea-ice modelling in Python James: smart data storage and domain specific languages for oceanographers

#### J6 – Friday August 5<sup>th</sup>, 2022

9am-12pm: preliminary reports1pm-5pm: presentations of results and discussion

#### J7 – Saturday August 6<sup>th</sup>, 2022

Departing from Stora Bornö.