

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 6th 2022



AWI, Geomar, MPI & NBI

(sponsored by NextGEMS)

Bornö Summer School 2022

J1 – Sunday July 31th, 2022

Travelling to Stora Bornö.

J2 – Monday August 1th, 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 3th, 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 4th, 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 5th, 2022

9am-12pm: preliminary reports

1pm-5pm: presentations of results and discussion

J7 – Saturday August 6th, 2022

Departing from Stora Bornö.