

Agenda of 12th FerryBox Workshop 1.-2. October 2024

Day 1: Tuesday 1 October 2024

8:30-9:30 *Registration + coffee, setting up posters*

9:30 *Welcome & Opening words*

Sami Niemelä, Finnish Meteorological Institute

Lauri Laakso, Finnish Meteorological Institute

Jukka Seppälä, Finnish Environment Institute

Session 1 FerryBox studies in the Baltic Sea (Chair Anna Wranne)

9:45 *Alg@line, 30+ years of FerryBox measurements in the Baltic Sea*
Jukka Seppälä, Finnish Environment Institute

10:00 *Multidisciplinary research at Utö Atmospheric and Marine Research Station, the Baltic Sea*
Lauri Laakso, Finnish Meteorological Institute

10:15 *Detection of filamentous cyanobacteria blooms using imaging and pulse shape flow cytometry, and optical sensors*
Kaisa Kraft, Finnish Environment Institute

10:30 *Spatio-temporal development of cyanobacteria bloom in the Baltic Sea during summer 2023*
Lumi Haraguchi, Finnish Environment Institute

10:45 *Overall discussion*

11:00-11:15 **Group photo and bio-break**

11:15 *Development of a Gas-Equilibrium – Membrane-Inlet Mass spectrometer (GE-MIMS) for continuous N₂, Ar and O₂ measurements on a voluntary observing ship to quantify nitrogen fixation in the Baltic Sea*
Sören Iwe, Leibniz-Institute for Baltic Sea research

11:30 *An analysis of temperature, salinity and potential energy variability in the surface layer of the Estonian sea area using ten years of R/V Salme ferrybox data*
Urmas Lips, Tallinn University of Technology

11:45 *Air-sea CO₂ exchange at Utö in the Baltic S*
Martti Honkanen, Finnish Meteorological Institute

12:00 *Seasonal variations of surface pH and pCO₂ in the Baltic Sea and the Kattegat-Skagerrak - observations from FerryBox systems*
Madeleine Nilsson, Swedish Meteorological and Hydrological Institute

12:15 *Overall discussion*

12:30-13:30 **Lunch**

Session 2 FerryBox in collaborative projects (Chair)

- 13:30 *FerryBox Task Team*
Andrew King, Norwegian Institute for Water Research:
- 13:45 *Next Generation Multiplatform Ocean Observing Technologies for Research Infrastructures*
Janne-Markus Rintala, ICOS ERIC Head Office
- 14:00 *SailingBox: a citizen science measuring system for sailing boats and yachts*
Stephan Deschner, Helmholtz-Zentrum Hereon
- 14:15 *Racing for the planet: Citizen Science on Racing Yachts in Global ClimateResearch*
Jana Fahning, SubCtech GmbH
- 14:301 *All the colors of the ocean. Advancement in remote sensing technology*
Urszula Kedzierska, University of Gdansk
- 14:45 *Impact of Storm Daniel on the Black Sea biogeochemistry*
Yoana Voynova, Helmholtz-Zentrum Hereon
- 15:00 *Overall discussion*
- 15:15-15:45 Coffee**

Poster Session (Chair Katri Kuuppo)

- 15:45 *Poster briefs*
- 17:30 *Posters with some refreshments*
- 19:00 - Dinner at restaurant Zetor**

Day 2: Wednesday 2 October 2024

Session 3 FerryBox data and products (Chair)

- 9:00 *Utilizing of FerryBox data in combination with other information sources for forecasting of cyanobacterial blooms*
Heikki Peltonen, Finnish Environment Institute
- 9:15 *FBDataM, an R package to process high resolution data from Ferry Boxes and more...*
Alain Lefebvre, Ifremer
- 9:30 *Information Technology applied for harmonization, quality control, and dissemination of data provided by the Surface Water Sampling System of the IEO*
Gonzalo Gonzales Nuevo, Instituto Español de Oceanografía
- 9:45 *Ferrybox data from ship to your desktop*
Ludovic Drouineau, Ifremer
- 10:00 *Serendipity at the Strait: The discovery of a natural oil seep in the Strait of Magellan through FerryBox surveys*
Danilo Astorga-Gallano, Universidad Austral de Chile
- 10:15 *Overall discussion*
- 10:30 Coffee**

Session 4 FerryBox Technologies (Chair)

- 11:00 *FerryBox plankton observations in the Baltic Sea and the Kattegat-Skagerrak using bio-optics and automated imaging in flow – focus on cyanobacteria blooms*
Bengt Karlson, Swedish Meteorological and Hydrological Institute
- 11:15 *Advanced Phytoplankton Monitoring in Ocean Research*
Tobias Boehme, bbe Moldaenke GmbH
- 11:30 *AlgaeOnlineAnalyzer as part of a FerryBox - technical improvements and results operating in the German Wadden Sea*
Dagmar Daehne, Coastal Defense and Nature Conservation Agency
- 11:45 *Unattended eDNA filtering on a Ferrybox*
Pierre Jaccard, Norwegian Institute for Water Research
- 12:00 *Advancing Ocean Observation: New Instrumentation for FerryBox Systems in the NAUTILOS Project*
Manolis Ntoumas, Hellenic Centre for Marine Research
- 12:15 *Overall discussion*
- 12:30-13:30 Lunch**

Session 4 continues: FerryBox Technologies (Chair)

- 13:30 *Enhancing the traceability of fluorometer measurements; report from project MINKE including Metrology Workshop on Monday 30.9.2024*
Jukka Seppälä, Finnish Environment Institute
- 13:45 *Experiences from calibration of standard bio-optical sensors*
Kai Sørensen, OceanObs AS, Norway & Norwegian Institute for Water Research
- 14:00 *Microplastics - (almost) everywhere but still difficult to sample?*
Maik Grunwald, -4H-JENA engineering GmbH
- 14:15 *Lessons Learned from Designing a Ferrybox with Microplastic Sampler*
Karl Vene, Flydog Marine
- 14:30- Discussions and overall feedback
- 15:30 Coffee**
- 17:00 End of the workshop