

11th FerryBox Workshop
28-29 September 2022
Helmholtz-Zentrum Hereon
Geesthacht, GERMANY
-and online-

Conference Agenda

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Day 1: Wednesday 28 September 2022

09:00 - 09:15 **Welcome and Introduction**

Session 1: 20+ Years of FerryBox for Ocean Research

09:15 - 09:30 *20 years of FerryBox developments at NIVA*
Kai Sørensen, NIVA

09:30 - 09:45 *Twenty-five years of FerryBox measurements between Tallinn and Helsinki – highlights from the past and future perspectives*
Villu Kikas, Tallinn University of Technology

09:45 - 10:00 *FerryBox activities in the Aegean Sea (Eastern Mediterranean)*
Constantin Frangoulis, HCMR

10:00 - 10:15 *20 years of FerryBox at Hereon*
Wilhelm Petersen, Helmholtz Zentrum Hereon

10:15 - 10:25 Roundup of Session 1

10:25 - 10:55 **Coffee Break**

Session 2: Inorganic and Organic Carbon

10:55 - 11:10 *Carbon in coastal seas*
Helmuth Thomas, Helmholtz Zentrum Hereon

11:10 - 11:25 *Utö coastal observatory*
Lauri Laakso, Finnish Meteorological Institute

11:25 - 11:40 *Variation in organic carbon along Norwegian coastline based on FerryBox monitoring*
Helene Frigstad, NIVA

11:40 - 11:55 *Quantifying how small-scale, short-lived, advective and biologically driven processes alter the carbon uptake capacity in a shelf sea*
Vlad Macovei, Helmholtz Zentrum Hereon

11:55 - 12:10 *Observations of the carbonate system in the Baltic Sea area*
Anna Willstrand Wranne, SMHI

12:10 - 12:25 *Carbostore Project: Results for pCO₂ and water quality in coastal regions of Lower Saxony*
Dagmar Daehne & Lara Luitjens, NLWKN Norden

12:25 - 13:25 **Lunch Break**

13:25 - 13:40 *ICOS Oceans, recent developments and future prospects*
Richard Sanders, NORCE

13:40 - 13:55 *Using ICOS and Argo infrastructure ocean carbon observations*
Tobias Steinhoff, GEOMAR & NORCE

- 13:55 - 14:10 *Investigating the Black Sea carbonate system: First results from the SeaReCap project*
Yoana Voynova, Helmholtz Zentrum Hereon
- 14:10 - 14:25 *Carbon cycling in the Elbe estuary*
Louise Rewrie, Helmholtz Zentrum Hereon
- 14:25 - 14:35 Roundup of Session 2

Session 3: Biological Oceanography

- 14:35 - 14:50 *Automated observations of phytoplankton in the Kattegat-Skagerrak and the Baltic Sea using the Imaging FlowCytobot and other sensors on R/V Svea*
Bengt Karlson, SMHI
- 14:50 - 15:05 *Multiplatform detection of filamentous cyanobacteria blooms in the Baltic Sea*
Kaisa Kraft, Finnish Environment Institute
- 15:05 - 15:35 Coffee Break**
- 15:35 - 15:50 *Long-term studies with special aspects on Cyanobacteria*
Tobias Boehme, bbe Moldaenke GmbH
- 15:50 - 16:05 *Estimating chlorophyll a from chlorophyll fluorescence*
Lena Viktorsson, SMHI
- 16:05 - 16:20 *On the use of automated underway recording for characterizing phytoplankton communities at sub-mesoscale in different marine systems*
Luis Felipe Artigas, CNRS UMR 8187 LOG - ULCO
- 16:20 - 16:35 *FerryBox Magallanes: Autonomous monitoring system to measure physical and biological chemical processes in austral fjords and channels. Challenges and opportunities.*
Ricardo Giesecke, Universidad Austral de Chile
- 16:35 - 16:50 *Combining FerryBox data with satellite data to study the mesoscale variability within WMED*
Sana Ben Ismail, INSTM
- 16:50 - 17:00 Roundup of Session 3
- 17:00 - 18:00 Visit of monitoring station Tesperhude**
- 18:00 - 21:30 Boat trip and dinner on the Elbe River (embarking at station Tesperhude)**

Day 2: Thursday 29 September 2022

Session 4: Ecosystem Dynamics & Assessment

09:00 - 09:15	<i>Climatology and trends in Chl-a and nutrients from FerryBox timeseries in the Baltic Sea</i> Jukka Seppälä, SYKE
09:15 - 09:30	<i>Phytoplankton photophysiology over a 20°W latitudinal transect in the North Atlantic surface ocean</i> Hedy Maria Aardema, Max Planck Institute for Chemistry
09:30 - 09:45	<i>Status and future plans of the new "Connector Ferrybox-line" in the North Sea as a contribution to MSFD reporting on Eutrophication - Experiences from Jerico-S3, TNA project APHYMOSO and NORSOOP</i> Kees Borst, Rijkswaterstaat & Kai Sørensen, NIVA
09:45 - 10:00	<i>Ferrybox chlorophyll a measurements in context of the Eutrophication assessment</i> Karin Heyer, Bundesamt für Seeschifffahrt und Hydrographie
10:00 - 10:10	<i>The effect of offshore windfarms on oceans primary production</i> Eva Drenguis, Helmholtz Zentrum Hereon
10:10 - 10:20	Roundup of Session 4

Session 5: FerryBox techniques and sensors

10:20 - 10:30	<i>Applicability of a UV-Nitrate sensor at a coastal FerryBox Station</i> Alina Neele Zacharzewski, Helmholtz Zentrum Hereon
10:30 - 11:00	Coffee Break
11:00 - 11:15	<i>Autonomous robust measurement technology for climate data and microplastics for all types of ships</i> Nuno Nunes, SubCtech GmbH
11:15 - 11:30	<i>Development of sampling and analyses of microplastic module for the FerryBox</i> Bert van Bavel, NIVA
11:30 - 11:45	<i>CONTROS – sensor systems for oceanographic multiparameter determinations</i> Nadja Kinski, -4H-Jena engineering
11:45 - 12:00	<i>From macro fluidics to micro fluidics</i> Pierre Jaccard, NIVA
12:00 - 12:10	Roundup of Session 5

Session 6: Data Management & Applications / Digital Platforms

12:10 - 12:25	<i>NIVA Ferrybox data management</i> Elizaveta Protsenko, NIVA
12:25 - 12:40	<i>Incremental clustering of high frequency coastal and marine observations for the detection of changes in the environmental states and phytoplankton communities and, early warning of HABs</i> Raed Halawi Ghosn, IFREMER
12:40 - 13:40	Lunch Break
13:40 - 13:55	<i>Integrating statistical analysis and data-driven modelling for predicting coastal DO levels near Cyprus</i> Ekaterini Hadjisolomou, Cyprus Marine and Maritime Institute
13:55 - 14:10	<i>Scientists for Ocean Literacy – EuroGOOS Ocean Decade project</i> Dina Eparkhina, EuroGOOS
14:10 - 14:25	<i>Blue Insight – A digital platform specialized on ocean data in support of science, industry and collaboration</i> Peer Fietzek, Kongsberg Maritime
14:25 - 14:40	<i>Development of web apps to facilitate QC and dissemination of TSG data from IEO research vessels</i> Gonzalo Gonzalez-Nuevo, IEO-CSIC
14:40 - 14:55	<i>EMODNet – update and outlook</i> Patrick Gorringe, SMHI
14:55 - 15:10	<i>Data Management HELMI – HEreon Layer for Managing Incoming data</i> Max Böcke & Linda Baldewein, Helmholtz Zentrum Hereon
15:10 - 15:20	Roundup of Session 6
15:20 - 15:50	Closing Session