PROGRAMME

Link to the Zoom meetings for all four days (17–20 May 2022)

https://zoom.us/j/91659708688?pwd=UjBSMG5DRjR3UGc3N3E2YldVOURRUT09

Tuesday, May 17

Opening Session (4 pm – 4:20 pm*)

Michael Nones: Introduction and first remarks

Mariusz Majdański: Institute of Geophysics Polish Academy of Sciences

Gregory Pasternack: IAHR Ecohydraulics Committee

Agata Keller: IAHR YPN Poland

Baptiste Marteau: EcoENet

Keynote Lecture (4:20 pm – 5:20 pm)

Stephen Dugdale: **Remote sensing of river temperature in a changing climate: from knowledge to applied river management**

break (5:20 pm – 5:30 pm)

Technical Session (5:30 pm – 6:20 pm)

Björn Baschek, Edvinas Rommel, Frederik Kathöfer, Laura Giese, Katharina Fricke, Tina Mölter, Filip Dzunic, Maryam Asgari, Paul Näthe, Paul Deffert, Gilles Rock, Jens Bongartz, Andreas Burkart, Maike Heuner, Ina Quick, Uwe Schröder: Mapping riparian vegetation and hydromorphology with UAS and machine learning

Matteo Redana, Lesley Lancaster: Accurate estimation of water temperature from UAV-mounted thermal camera: the use of generalized additive models and Dynamic Programming Algorithm to correct for vingetting effect and thermal shift

break (6:20 pm – 6:30 pm)

Discussion (6:40 pm – 8 pm)

* CET time

Wednesday, May 18

Day 1 wrap-up (4 pm – 4:10 pm)

Keynote Lecture (4:10 pm – 5:10 pm)

Nicholas Porter: **Can you hear me now? An overview of telemetry technologies and their applications**

break (5:10 pm – 5:20 pm)

Technical Session (5:20 pm – 6:40 pm)

David Farò, Katharina Baumgartner, Robert Klar, Andrea Andreoli, Francesco Comiti, Markus Aufleger, Guido Zolezzi: Integrating remote sensing and 2D hydraulic modelling for meso-habitat modelling in the Aurino, a gravel-bed Alpine river

Lisa Schmalfuss, Martin Schletterer, Christoph Hauer: Hydraulic Modeling of a Glacial Lake Outburst Flood (GLOF) Scenario at the River Biya

Massimiliano Gargiulo, Carmela Cavallo, Maria Nicolina Papa, Giuseppe Ruello, Michael Nones: Deep Learning Approach for river hydro-morphodynamics monitoring using SAR data

Julien Godfroy, Jérôme Lejot, Luca Demarchi, Kristell Michel, Hervé Piégay: Processing of hyperspectral aerial images to characterise the bathymetry of rivers

break (6:40 pm – 6:50 pm)

Discussion (6:50 pm – 8 pm)

Thursday, May 19

Day 2 wrap-up (4 pm – 4:10 pm)

Keynote Lecture (4:10 pm – 5:10 pm)

Antoin O'Sullivan: **A picture speaks a thousand words: remote sensing in ecohydraulics**

break (5:10 pm – 5:20 pm)

Technical Session (5:20 pm – 6:20 pm)

Abhishek Bamby Alphonse, *K.N Kusuma:* Geographical Information System based morphometric analysis of Dibang River, Arunachal Pradesh, India

Lukas Kirchgäßner, *Günther Unfer:* Evaluation of Restoration Projects with Hyperspatial Remote Sensing of Fish Habitat using an Unmanned Aerial Vehicle (UAV)

Anna Loboda, *Emilia Karamuz:* How to avoid difficulties in a proper acquisition of remote sensing data? Measurements of sand waves movement in the Świder River, Poland

break (6:20 pm – 6:30 pm)

Discussion (6:30 pm – 8 pm)

Friday, May 20

Day 3 wrap-up (4 pm – 4:10 pm)

Keynote Lecture (4:10 pm – 5:10 pm)

Knut Alfredsen: **Experiences with LiDAR and aerial imagery for the assessment of winter habitat, hydraulic modelling and riverscape classification**

break (5:10 pm – 5.20 pm)

Technical Session (5:20 pm – 6:20 pm)

Chunying Wu, Michael Stewardson, Angus Webb, Stefan Norra: Modelling vegetation condition using a water balance model and Long Short-Term Memory networks on a floodplain receiving environmental water

Yi Zhou, Yue Zhang,Yu Han: Experimental study on swimming behaviour of fish in an open channel based on video recognition

Huhu Liu, Yu Han, Yi Zhou, Yue Zhang: Study on fish swimming behavior based on image velocimetry

break (6:20 pm – 6:30 pm)

Discussion (6:30 pm – 7:40 pm)

Closing remarks (7:40 pm – 8 pm)