



Virtual Symposium Agenda

Management of Extreme Events in Lakes and Catchments

14-15 October 2020

Day I – 14 October 2020 at 9:00 (UTC+1)

<u>Session 1: Impacts of Extreme Events in Aquatic Systems under Future Climatic Conditions – Chair: Maggie Armstrong</u>

- 09:00 09:05: Welcome and introduction Prof. Eleanor Jennings, DkIT, Ireland
- 09:05 9:25: Live keynote lecture "Forecasting lake water quality during extreme events across time-scales" Dr Rafael Marcé, ICRA, Spain
- 09:25 09:30: Question and Answer session with the keynote speaker
- 09:30 10:30: Pre-recorded talks (Ask questions to speakers) (Watch talks)
 - 09:30 09:45: "Impacts of climate change on lake surface heat fluxes. A global sensitivity analysis" Ana Ayala, UU, Sweden
 - 09:45 10:00: "Modelling the effect of storms on thermal structure, nutrient distribution, and phytoplankton growth" Jorrit Mesman, UG, Switzerland
 - 10:00 10:15: "Numerical modeling of the role of advection fluxes in the DO diel variations for estimating whole-lake metabolism" Nasime Janatian, EMU, Estonia
 - 10:15 10:30: "The bright side of brownification, and the dark side of light" Truls Hansson, FV-Berlin, Germany
- 10:30 10:50: Question and Answer session with the keynote and oral speakers (20 min)
- 10:50 11:00: Break

<u>Session 2</u>: Exploring Lake Ecosystem Resilience to Extreme Events – Chair: Hares Khan

- 11:00 11:20: Live keynote lecture "*Lakes under climate change: trends and extremes*" Prof. Rita Adrian, FV-Berlin, Germany
- 11:20 11:25: Question and Answer session with the keynote speaker
- 11:25 12:10: Pre-recorded talks (Ask questions to speakers) (Watch talks)
 - 11:25 11:40: "Impacts of Extreme Weather Events on Bacterial Community Composition of a Temperate Humic Lake" Alexa Hoke, DkIT, Ireland

- 11:40 11:55: "Metrics of Recovery for Understanding Additive Effect of Perturbations into the Microbial Community Suffering Eutrophication" Julio Stelzer, UG, Switzerland
- 11:55 12:10: "The determination of critical thresholds for lake ecosystem resilience from long high frequency data" Michael Thayne, FV-Berlin, Germany
- 12:10 12:30: Question and Answer session with the keynote and oral speakers (20 min)

Day II – 15 October 2020 at 9:00 (UTC+1)

<u>Session 3: Using High Frequency Monitoring to Explore Extreme Events in Aquatic Systems –</u> Chair: Jorrit Mesman

- 09:00 09:05: Welcome and introduction Dr Gosia Golub, DkIT, Ireland
- 09:05 09:25: Live keynote lecture "Using Automated High-Frequency Monitoring to Explore Episodic and Extreme Events in Aquatic Ecosystem" Dr Alo Laas, EMU, Estonia
- 09:25 09:30: Question and Answer session with the keynote speaker
- 09:30 10:15: Pre-recorded talks (<u>Ask questions to speakers</u>) (<u>Watch talks</u>)
 - 09:30 09:45: "Calcite precipitation, a major driver of carbon fluxes in lakes and reservoirs?" Hares Khan, UB, Spain
 - 09:45 10:00: "Extreme weather-related events rarely coincide with extreme lake mixing events" Harriet Wilson, DkIT, Ireland
 - 10:00 10:15: "High-Frequency sensor measurements supported modelling instream nitrogen uptake at extreme summer low flow" Dr Jingshui Huang, UFZ-Magdeburg, Germany
- 10:15 10:35: Question and Answer session with the keynote and oral speakers
- 10:35 11:00: Break

<u>Session 4: Informing the Protection of Lake Ecosystem Services from the Impacts of Extreme</u> <u>Events – Chair: Harriet Wilson</u>

- 11:00 11:20: Live keynote lecture "Bridging the gap between science and management in lakes under extreme events" Dr Lisette de Senerpont Domis, NIOO-KNAW, the Netherlands
- 11:20 11:25: Question and Answer session with the keynote speaker
- 11:25 12:10: Pre-recorded talks (Ask questions to speakers) (Watch talks)
 - 11:25 11:40: "Intensity of wastewater treatment upstream a reservoir defines the resistance of its water quality to extreme climatic events" Elias Munthali, ICRA, Spain
 - 11:40 11:55: "A modelling approach to ecosystem service provisioning in lakes under extreme climatic events" Maggie Armstrong, NIOO-KNAW, the Netherlands

- 11:55 12:10: "Effectiveness of phosphorus control under extreme heatwaves: implications for sediment nutrient release and greenhouse gasses emission" Qing Zhan, NIOO-KNAW, the Netherlands
- 12:10 12:30: Question and Answer session with the keynote and oral speakers
- 12:30 12:35: Closing remarks Prof. Eleanor Jennings, DkIT, Ireland