

## Conference Programme – Course and Contents

Tuesday, 15 June 2021

13:00	Opening of the Conference <i>Peter Krebs, TU Dresden &amp; Markus Weiler, University of Freiburg</i>			
13:10	Release and Presentation of the Water Science Alliance Strategy Paper <i>Florian Leese – University of Duisburg-Essen, Germany</i>			
13:30	<b>Keynote: Flash Droughts</b> <i>Justin Sheffield – University of Southampton, UK &amp; Princeton Climate Institute, US</i>			
14:10	Award Ceremony for the ‘Water-Monitoring Prize’ of the Ritter Foundation <i>Awardees: Suzanne Jacobs &amp; Björn Weeser, Giessen University</i>			
14:45	15 min Break			
15:00	<b>Session A1: Drought and Water Security</b> <i>Chair: Harald Horn, KIT</i>		<b>Session C1: Tipping Elements – Response to Extremes</b> <i>Chair: Markus Weiler, Univ. of Freiburg</i>	
	<b>At Risk of Drought: Prediction Challenges from Climate to Hydrology to Impact</b> <i>Kerstin Stahl – University of Freiburg, Germany</i>		<b>Protecting Rivers from High Water Temperature Extremes under Global Change</b> <i>David Hannah – University of Birmingham, UK</i>	
15:30	<b>Drought and Variability – Coping with Risk and Uncertainty</b> <i>Mariele Evers – University of Bonn, Germany</i>		<b>Continental-Scale Patterns and Causes of River Flooding</b> <i>Wouter Berghuijs – VU Amsterdam, The Netherlands</i>	
16:00	<b>Water Scarcity in Germany: Lessons Learned after 3 Years and Perspective Options for Action</b> <i>Christoph Donner – Harzwasserwerke GmbH, Hildesheim, Germany</i>		<b>Response of Riverine Biota to Multiple Stressors</b> <i>Daniel Hering – University of Duisburg-Essen, Germany</i>	
16:30	10 min Break			
16:40	Introduction to Open Space Workshops <i>Chair: Jörg Seegert, TU Dresden</i>			
16:50	<b>Open Space (a) Water Futures – Research under Dynamic Extremes</b> <i>H. Kosow, Univ. Stuttgart &amp; S. Kirschke, UNU FLORES, Dresden</i>	<b>Open Space (b) NFDI meets Water (NFDI4Earth &amp; NFDI4Ing)</b> <i>P. Braesicke, KIT &amp; P. Pelz, TU Darmstadt</i>	<b>Open Space (c) Water Science Alliance Strategy Paper</b> <i>Florian Leese, Univ. Duisburg-Essen et al.</i>	<b>Open Space (d) Workshop for Young Career Scientists</b> <i>Water Research Network Baden-Württemberg</i>
19:00	Evening Event: Virtual Come Together			
20:00	Guided Virtual Tour to the Region's Gothic Cathedrals and the Black Forest <i>Nicole Clemens (further information: <a href="https://www.nicoleklemens.de/">https://www.nicoleklemens.de/</a>)</i>			

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13:00	Results of the Open Space Workshops, <i>Chair: Jörg Seegert, TU Dresden</i>	
13:15	<b>Keynote: Ecosystem Response to Extreme Droughts</b> <i>Christiane Werner – University of Freiburg, Germany</i>	
13:55	Award Ceremony ‘Water Resources Prize’ of the Rüdiger Kurt Bode Foundation <i>Awardee: Harald Kunstmann, KIT &amp; University of Augsburg</i>	
14:35	15 min Break	
14:50	<b>Session A2: Ecosystems under Pressure</b> <i>Chair: Florian Leese, Univ. Duisburg-Essen</i>	<b>Session B1: Floods, Sediments and Pollution</b> <i>Chair: Markus Weiler, Univ. of Freiburg</i>
	<b>Predicting Impacts of Climate and Subsequent Hydrological Changes on Stream Organisms</b> <i>Sonja Jähnig – Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB), Berlin, Germany</i>	<b>Changes in Hydrogeomorphic Response to Extreme Rainfall in Headwaters: Hazards &amp; Vulnerabilities</b> <i>Marco Borga – University of Padua, Italy</i>
15:20	<b>Forests and Droughts – Stress Indicators in Intensive Forest Monitoring</b> <i>Lothar Zimmermann – Bavarian State Institute of Forestry, Germany</i>	<b>Assessment of Bedload Supply in Steep Torrents during Floods: An Instrument for Strategic Planning with Local Impact</b> <i>Catherine Berger – Natural Hazards, Geo7, Bern, Switzerland</i>
15:50	<b>Multiple Perspectives on Large-Scale Ecosystem Response to Drought</b> <i>René Orth – Max Planck Institute for Biogeochemistry Jena, Germany</i>	<b>New Insights into Rain-Driven Pesticide Dynamics with High-Temporal Resolution On-Site Measurements in Agricultural Catchments</b> <i>Christian Stamm – eawag, Dübendorf, Switzerland</i>
16:20	10 min Break	
16:30	<b>Session B2: Extremes in Urban Areas</b> <i>Chair: Peter Krebs, TU Dresden</i>	<b>Session C2: Multi-Hazard Risks</b> <i>Chair: Ulrike Scherer, KIT</i>
	<b>Let (Urban) Water and Data Flow</b> <i>Peter Steen Mikkelsen – DTU, Denmark</i>	<b>The Co-Evolution of Droughts and Heatwaves in Europe</b> <i>Luis Samaniego – Helmholtz Centre for Environmental Research Leipzig (UFZ), Germany</i>
17:00	<b>Attribution of Changes in Drought and Flood Damage</b> <i>Heidi Kreibich – German Research Centre for Geosciences (GFZ), Potsdam, Germany</i>	<b>Adaptive Behaviour of Residents across Different Weather-Related Hazards</b> <i>Annegret Thieken – University of Potsdam, Germany</i>
17:30	<b>Extreme Precipitation – Lessons for Urban Development and Urban Renewal</b> <i>Jörn Birkmann – University of Stuttgart, Germany</i>	<b>Multi-Hazards and the Assessing of Cascading Effects: Challenges and Ways Forward</b> <i>Christian Kuhlicke – Helmholtz Centre for Environmental Research Leipzig (UFZ), Germany</i>
18:00	Concluding Remarks	
19:15	Guided Virtual Tour: Exhibition ‘Critical Zones’ at the Center for Art and Media Karlsruhe (further information: <a href="https://zkm.de/en/exhibition/2020/05/critical-zones">https://zkm.de/en/exhibition/2020/05/critical-zones</a> )	