

Water Research Horizon Conference – 15/16 June 2021

DROUGHTS, FLOODS AND THEIR EMERGING CHALLENGES

Preliminary Schedule

Tuesday, 15 June 2021

13:00-13:10	Opening of the Conference (Peter Krebs / Markus Weiler)			
13:10-13:30	Research Funding Strategy of BMBF (<i>enq.</i>) / Strategy Paper of Water Science Alliance			
13:30-14:10	Keynote (A): Flash Droughts, Justin Sheffield			
14:15-14:45	Award Ceremony for the 'Water-Monitoring Prize' of the Ritter Foundation			
14:45-15:00	15 min Break			
15:00-16:30	Session A1 Drought and Water Security		Session C1 Tipping Elements – Response to Extremes	
16:30-16:40	Introduction of the Open Space Workshops			
16:40-16:50	10 min Break			
16:50-18:15	Open Space 1: Water Research under dynamic Extremes (H. Kosow & S. Kirschke)	Open Space 2: NFDI4Earth & 4Ing meet WSA (P. Braesicke & P. Pelz)	Open Space 3: Water S. Alliance 'Strategy Paper' <i>but still open</i>	Open Space 4: Workshop for Young Career Scientists (Wassernetzwerk Baden-Württemberg)
	Evening Event			

Wednesday 16 June 2021

13:00-13:15	Results of the Open Space Workshops			
13:15-13:55	Keynote: Ecosystem Response to Extreme Droughts, Christiane Werner			
14:55-14:35	Award Ceremony 'Water Resources Prize' of the Rüdiger Kurt Bode Foundation			
14:35-14:50	15 min Break			
14:50-16:20	Session A2 Ecosystems under Pressure		Session B1 Floods, Sediments and Pollution	
16:20-16:30	10 min Break			
16:30-18:00	Session B2 Extremes in Urban Areas		Session C2 Multi-Hazard-Risks	
18:00-18:15	Closing of the Conference			

Keynotes		
mainly focused on Droughts	mainly focused on Floods	Cross Cutting Topics
Keynotes		

Flash Droughts

Justin Sheffield – Hydrology and Remote Sensing, University of Southampton (UK)

<https://www.southampton.ac.uk/geography/about/staff/js1c15.page>

Ecosystem Response to Extreme Droughts

Christiane Werner – Ecosystem Physiology, University of Freiburg

<https://www.cep.uni-freiburg.de/mitarbeiter/christiane-werner>

Session A1: Droughts and Water Security | 15.6.2021 15:00 – 16:30

At Risk of Drought: Prediction Challenges from Climate to Hydrology to Impact

Kerstin Stahl – Environmental Hydrological Systems, University of Freiburg

<https://www.hydro.uni-freiburg.de/mitarbeiter/stahl>

Drought and Variability - Coping with Risk and Uncertainty

Mariele Evers – Ecohydrology and Water Resource Management, University of Bonn

<https://www.geographie.uni-bonn.de/das-institut/personal/wissenschaftliches-personal/evers-mariele>

Water Scarcity in Germany: Lessons Learned after three Years and Perspective Options for Action

Christoph Donner – Harzwasserwerke GmbH, Hildesheim

<https://www.harzwasserwerke.de/?=11032021175553>

Session A2: Ecosystems under Pressure | 16.06.2021, 14:50 – 16:20

Multiple Perspectives on Large-scale Ecosystem Response to Drought

René Orth – Hydrology-Biosphere-Climate Interactions, Max Planck Institute for Biogeochemistry Jena

<https://www.bgc-jena.mpg.de/bgi/index.php/People/ReneOrth>

Forests & Droughts – Evidence of Risks and Implications for Soil- and Water-related Ecosystem Services

Karl-Heinz Feger – Site Ecology and Plant Nutrition, TU Dresden

<https://tu-dresden.de/bu/umwelt/forst/boden/das-institut/staff/professoren/prof-dr-karl-heinz-feger>

Predicting Impacts of Climate and subsequent hydrological Changes on Stream Organisms

Sonja Jähnig – Ecosystem Research, Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB)

<https://www.igb-berlin.de/profile/sonja-jaehnic>

Session B1: Floods, Sediments and Pollution | 16.06.2021, 14:50 – 16:20

Changes in Hydrogeomorphic Response to Extreme Rainfall in Headwaters: Hazards & Vulnerabilities

Marco Borga – Agricultural, Forestry and Biosystems Engineering, University of Padua (IT)

<https://www.tesaf.unipd.it/en/marco-borga>

Assessment of Bedload Supply in steep Torrents during Floods: an Instrument for strategic Planning with local Impact

Catherine Berger – Natural Hazards, Geo7 – Bern (CH)

<https://geo7.ch/coworker/?catherine-berger>

New insights into rain-driven pesticide dynamics with high-temporal resolution on-site measurements in agricultural catchments

Christian Stamm – Environmental Chemistry, eawag Dübendorf (CH)

<https://www.eawag.ch/en/aboutus/portrait/organisation/staff/profile/christian-stamm/>

Session B2: Extremes in Urban Areas | 16.06.2021, 16:30 – 18:00

Let (Urban) Water and Data flow

Peter Steen Mikkelsen – Environmental Engineering, TU of Denmark (DK)
<https://www.dtu.dk/english/service/phonebook/person?id=2718&tab=1>

Attribution of Changes in Drought and Flood Damage

Heidi Kreibich – Flood Risk and Climate Adaptation, German Research Centre for Geosciences (GFZ) Potsdam, <https://www.gfz-potsdam.de/staff/heidi-kreibich/sec44/>

Extreme Precipitation - Lessons for Urban Development and Urban Renewal

Jörn Birkmann – Urban Development and Spatial Planning, University of Stuttgart
<https://www.uni-stuttgart.de/presse/experten/Prof.-Dr.-Joern-Birkmann/>

Session C1: Tipping Elements – Response to Extremes | 15.06.2021, 15:00 – 16:30

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David Hannah – Hydrology, University of Birmingham (UK)
<https://www.birmingham.ac.uk/staff/profiles/gees/hannah-david.aspx>

Continental-scale Patterns and Causes of River Flooding

Wouter Berghuijs – Earth Sciences, VU Amsterdam (NL)
<https://www.researchgate.net/profile/Wouter-Berghuijs>

Response of Riverine Biota to multiple Stressors

Daniel Hering – Aquatic Ecology, University of Duisburg-Essen
https://www.uni-due.de/aquatische_oekologie/mitarbeiter/hering.shtml

Session C2: Multi-Hazard-Risks | 16.06.2021, 16:30 – 18:00

The Co-Evolution of Droughts and Heatwaves in Europe

Luis Samaniego – Computational Hydrosystems, Helmholtz Centre for Environmental Research Leipzig – UFZ
<https://www.ufz.de/index.php?en=38094>

Adaptive Behaviour of Residents across different Weather-related Hazards

Annegret Thieken – Geography and Disaster Risk Research, University of Potsdam
<https://www.uni-potsdam.de/de/umwelt/institut/alle-mitarbeiterinnen/thieken-annegret.html>

Multi Hazards and the assessing of cascading Effects: Challenges and Ways forward

Christian Kuhlicke – Environmental Risks and Extreme Events, Helmholtz Centre for Environmental Research Leipzig – UFZ / University of Potsdam
<https://www.ufz.de/index.php?de=40374>