

# The Future of Flood Research- Expectations on Scientific Developments in the Next 10 Years

Final Symposium of the SPATE Research Unit

23 April 2023

Festsaal of TU Vienna, Karlsplatz 13, Vienna, Austria

08:30 Get together

09:00 Opening

**Andreas Schumann**, speaker of SPATE

09:15 Hydrology of Extraordinary Floods – Event Analyses

**Svenja Fischer**, **Andreas Schumann**

09:35 Atmospheric Drivers of Extreme Floods

**Bodo Ahrens**

09:55 From Small to Extreme Floods

**Sergiy Vorogushyn**, **Bruno Merz**

10:15 Synthesis of Flood Frequency Models: the Value of  
Uncertainty Estimation

**Alberto Viglione**

10:30 Coffee Break

11:00 Flood types – Controls in a Changing World

**Ralf Merz**, **Larisa Tarasova**

11:20 Interdependence of Extreme Floods

**András Bárdossy**

11:40 Decadal Changes of Flood Probabilities

**Günter Blöschl**

12:00 Predictability of Extreme Floods

**Uwe Haberlandt**, **Anne Bartens**

12.20-13:30 Lunch Break

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13:30 On the prevalence and impact of heavy tails on flood frequency analysis

***Richard Vogel***

13:50 Learning from historical observation for flood risk estimation

***Elena Volpi***

14:10 The case for updating design precipitation and flood extremes for future (warmer) climates

***Ashish Sharma***

14:30 Stochastically estimating the urban hydrological impact of the spatial variability of rainfall in a changing climate

***Christian Onof, Yuting Chen, Athanios Paschalis***

14:50 Coffee Break

15:20 Spatial and seasonal patterns of flood change across Brazil

***Pedro Chaffe***

15:40 Spatially compounding floods and their hydro-meteorological drivers

***Manuela I. Brunner***

16:00 Bayesian Generalized Least Squares Regression for Hydrologic Regionalization

***Jery Stedinger***

16:20 Geomorphic flood hazard mapping: from floodplain delineation to flood hazard characterization

***Attilio Castellarin***

16:45 Panel Discussion: The Future of Flood Research

18:00 Closing