

# Water Ages in the Hydrological Cycle

27.-31. October 2019

Waldhotel Zollernblick, Freudenstadt, Germany



**The Black Forest Autumn School will teach approaches, methods and models to determine water fractions, water ages and transit times throughout the hydrological cycle and will foster inter-disciplinary discussions. Lectures and hands-on exercises including a small model inter-comparison project will provide a stimulating learning environment.**

The rapid development of instrumental methods resulted in new opportunities for water flow paths estimation and water flux quantification. However, it remains a challenge how to make

predictions using the different tracer techniques, ranging from natural tracers (e.g., isotopes of water, carbon and nitrogen, water temperature) to noble gas tracers and other natural and anthropogenic substances in the water, and to cover travel times from hours to several decades and centuries throughout hydrological compartments. The Autumn School brings together the multidisciplinary experience and knowledge of several researchers of measuring and simulating water ages and transit times with special focus on the interlinkages between the atmosphere, vegetation, soils, ground- and surface waters.

## Course Lecturers

Prof. Dr. Markus Weiler, University Freiburg, Germany  
Prof. Dr. Christine Stumpp, BOKU Vienna, Austria  
Prof. Dr. James Kirchner, ETH Zürich, Switzerland

Dr. Matthias Sprenger, North Carolina State University, USA  
Dr. Markus Hrachowitz, TU Delft, Netherlands  
Dr. Paolo Benettin, EPFL Lausanne, Switzerland

## Location

The autumn school will be held in the Waldhotel Zollernblick in the Black Forest, 45 km east of Offenburg (<https://www.zollernblick-lauterbad.de/en/>). The location allows interaction and discussion among participants and lecturers during the whole autumn school and hence also discussions outside the regular programme.

The hotel offers meeting facilities, accommodation, meals, SPA, sport facilities and can best be reached by train from Frankfurt Airport over Freudenstadt in 2:30h. The autumn school is limited to 25 participants.

## Support for Young Scientists

Free participation to the autumn school is granted to young scientists from Baden-Württemberg, Germany. Young scientists are PhD students or have received their PhD within the past three years. For all other participants, the course fee is 290€ including accommodation in double rooms, all meals and course

materials. All participants are responsible for their own transport, health insurance and other personal expenses. All participants need to send a motivation letter (1 page) and a short CV for the acceptance process.

## Organization und Contact

Markus Weiler, Chair of Hydrology, University Freiburg, Germany  
Ulrike Scherer, Water Research Network Baden-Württemberg

phone +49 721 608-48230  
email: [info@wassernetzwerk-bw.de](mailto:info@wassernetzwerk-bw.de)

## Important Deadlines

|                                   |   |
|-----------------------------------|---|
| <b>Submission of application:</b> | <b>15. July 2019 → <a href="mailto:info@wassernetzwerk-bw.de">info@wassernetzwerk-bw.de</a></b> |
| <b>Letter of acceptance:</b>      | <b>25. July 2019</b>  |
| <b>Registration deadline:</b>     | <b>10. August 2019</b>  |
| <b>Start of autumn school:</b>    | <b>27.10.2019, 17:00</b>  |
| <b>End of autumn school:</b>      | <b>31.10.2019, 15:00</b>  |

The Autumn School is funded by:



Baden-Württemberg

MINISTERIUM FÜR WISSENSCHAFT, FORSCHUNG UND KUNST