



BASEMENT Users Meeting 2024

Date: January 25, 2024
Location: OST Campus Rapperswil-Jona (Switzerland) and online via Zoom
Organizers: Laboratory of Hydraulics, Hydrology and Glaciology (VAW), ETH Zurich
Institute for Construction and Environment, Eastern Switzerland
University of Applied Sciences (OST)

Welcome and Introduction

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|-------|---|-------|---------------------------------|-------------------------------|
| 09:00 | - | 09:15 | Registration | |
| 09:15 | - | 09:20 | Welcome address | Robert Boes, Davood Farshi |
| 09:20 | - | 09:45 | Current and future developments | David Vetsch |
| 09:45 | - | 10:30 | Coffee break | |

Session 1 - Flood risk assessment and management

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|-------|---|-------|---|-----------------|
| 10:30 | - | 11:00 | Sensitivity of flood impact to climatic changes in the main rivers and lakes of Switzerland | Markus Mosimann |
| 11:00 | - | 11:30 | BASEMENT 2-D application in the territorial planning of mountainous areas - from the design of hydraulic defence works to the definition of hazard maps | Marika Righetto |
| 11:30 | - | 12:00 | Investigation of friction coefficients for the 2D modeling of forest areas along rivers | Dany Suter |
| 12:00 | - | 13:30 | Lunch break | |

Session 2 - River restoration and morphodynamics

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|-------|---|-------|--|---|
| 13:30 | - | 14:00 | A Step-pool sequence, an environmentally friendly grade control structure as an alternative to old-style-concrete check dams: an application in the Western Italian Alps using BASEMENT as designing supporting tool | Nicola Groff, Silvia Simoni, Francesco Comiti |
| 14:00 | - | 14:30 | Morphodynamic simulations of complex river morphologies based on the lab results of the physical model of the Alpine Rhine | Gabriel Zehnder |
| 14:30 | - | 15:00 | Dam break wave propagation with morphodynamics | Andrea Antonella Graziano |
| 15:00 | - | 15:45 | Coffee break | |

Session 3 - News from the BASEMENT team

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| 15:45 | - | 16:05 | Tsunami wave generation mechanisms | Jana Schierjott |
| 16:05 | - | 16:25 | Temperature transport model | Davide Vanzo |
| 16:25 | - | 16:45 | Lagrangian transport model | Francesco Caponi, Daniel Conde |
| 16:45 | - | 17:05 | Mixed-size sediment transport model for BASEHPC | Matthias Bürgler |
| 17:05 | - | 17:15 | Summary | David Vetsch |