

## ZHydro: Hydrology Seminar

(Seminar für Hydrologie)

Wednesday, 12<sup>th</sup> November 2014, 9.00 – 16.15 Uhr  
ETH Zentrum, MM C78.1 (GEP Alumni Pavillon)

### Oral programme

9:00	Sonia I SENEVIRATNE <i>Land-Climate Dynamics, IAC, ETH Zurich</i>	Welcome
9:05	Nikolina BAN (25) <i>Climate and Water Cycle, IAC, ETH Zurich</i>	Projections of Heavy Hourly Precipitation Events in Convection-Resolving Climate Simulations
9:30	Peter GREVE (25) <i>Land-Climate Dynamics, IAC, ETH Zurich</i>	Global assessment of trends in wetting and drying over land
9:55	Ilja van MEERVELD (25) <i>Hydrology and Climate, Dept. of Geography, Univ. of Zurich</i>	Effects of reforestation of degraded land on hydrological flow pathways
10:20	<b>Coffee break / Posters</b>	
10:50	Silvan RAGETTLI (25) <i>Hydrology and Water Resources Manag., IfU, ETH Zurich</i>	Comparing the response of glacierized mountainous areas to climate change in the Central Himalaya and the Central Andes
11:15	Ali N. EBRAHIMI (15) <i>Soil and Terrestrial Environmental Physics, ITES, ETH Zurich</i>	Hydration State and Aqueous Phase Connectivity Shape Microbial Dispersal Rates in Unsaturated Angular Pore Networks
11:30	Frouke HOOGLAND (15) <i>Soil and Terrestrial Environmental Physics, ITES, ETH Zurich</i>	Viscous effects on drainage front zonation and the formation of temporarily entrapped and slowly draining domains
11:45	Hansjörg SEYBOLD (25) <i>Physics of Environmental Systems, ITES, ETH Zurich</i>	The signature of climate in the geometry of stream networks
12:10	<b>Lunch break</b>	
13:15	<b>Coffee, Cake and Posters</b>	
14:00	Márk SOMOGYVÁRI (15) <i>Engineering Geology, Geological Institute, ETH Zurich</i>	Tomographic thermal tracer investigation of aquifer heterogeneity
14:15	Peter Achtziger ZUPANČIČ (15) <i>Engineering Geology, Geological Institute, ETH Zurich</i>	Permeability-depth functions in the crystalline crust of the Ore Mountains
14:30	David MOESER (25) <i>Snow Hydrology, SLF, WSL</i>	Improving snow canopy interception modelling using aerial LiDAR data
14:55	Vidhya CHITTOOR VISWANATHAN (15) <i>Hydrogeology, Dept. Water Resources and Drinking Water, EAWAG</i>	Identification of hotspots of surface water quality on a large pre alpine catchment
15:10	Mehdi GHASEMIZADE (15) <i>Hydrogeology, Dept. Water Resources and Drinking Water, EAWAG</i>	What can we learn from lysimeter data in hydrology
15:25	<b>Concluding remarks</b>	
15:30	<b>Closing coffee, tea and sweets / Posters</b>	
16:15	<b>Closure</b>	

## Posters

- |   |   |  |
|---|---|--|
| 1 | Erfan HAGHIGHI<br><i>Soil and Terrestrial Environmental Physics, ITES, ETH Zurich</i> | Modeling evaporative fluxes from wavy porous surfaces  |
| 2 | Siul A. Ruiz<br><i>Soil and Terrestrial Environmental Physics, ITES, ETH Zurich</i>   | Soil bioturbation by earthworms and plant roots – mechanical and energetic considerations for plastic deformation            |
| 3 | Rahel BUSS<br><i>Mountain Hydrology, WSL</i>  | Evaluating different dominant runoff processes mapping approaches with similarity measures and synthetic runoff simulations. |
| 4 | Daniel SIDLER<br><i>Hydromechanics, IfU, ETH Zuerich</i>                              | Three-dimensional observation of immediate behavioral response of benthic copepods to changes in turbulence and temperature  |
| 5 | Pascal BURI<br><i>Hydrology and Water Resources Manag., IfU, ETH Zurich</i>           | On the role of ice cliffs on the melt and mass balance of a debris covered-glacier in the Nepalese Himalaya                  |
| 6 | Christoforos PAPPAS<br><i>Hydrology and Water Resources Manag., IfU, ETH Zurich</i>   | On the impact of land use changes in terrestrial water dynamics: insights from a controlled numerical experiment             |
| 7 | Matteo SALETTI<br><i>Hydrology and Water Resources Manag., IfU, ETH Zurich</i>        | Temporal pattern and memory in sediment transport in an experimental step-pool channel                                       |
| 8 | Nadine R. NICOLAI-SHAW<br><i>Land-Climate Dynamics , IAC, ETH Zurich</i>              | Spatial representativeness of soil moisture, soil moisture extremes and their links to external drivers                      |
| 9 | Rene ORTH<br><i>Land-Climate Dynamics , IAC, ETH Zurich</i>                           | Introduction of a simple-model-based land surface dataset for Europe   |

*Organisation: Chair of Land-Climate Dynamics, IAC, ETH Zurich*

*Info: Lukas Gudmundsson, Tel. 0 44 632 77 09, e-mail: [lukas.gudmundsson@env.ethz.ch](mailto:lukas.gudmundsson@env.ethz.ch)*

Posters can be setup from 8:30, Poster Format: Ao, Portrait  
Presentations are expected to be 20' or 10' + 5' for Q&A

## Venue

**Polybahn****GEP Pavillon****Hauptgebäude ETH**