**ETH** zürich



## D-BAUG Workshop on Natural Hazards

Programme

Thursday, 08 June 2017 ETH Hönggerberg, HCI J3



## **Morning Programme**

fluid saturation

Lunch

Introduction		
08:30-08:35	<b>Prof. Thomas Vogel</b> (Head of department D-BAUG) Introduction	
08:35-08:45	<b>Prof. Sarah Springman</b> (Rector of ETH Zurich) Welcoming address	
Session 1 - Landslides and Earthquakes		
08:45-09:30	<b>Prof. Eduardo Alonso</b> (Politechnical University of Catalonia - Invited)  Modelling fast landslides: the case of Vaiont	
09:30-09:45	<b>Prof. Alexander Puzrin</b> (IGT) Submarine landslides: unifying shear band propagation approach	
09:45-10:00	<b>Dr. Helge Fuchs</b> (VAW) Impulse waves generated by granular submarine slides	
10:00-10:15	<b>Philipp W. Oberender</b> (IGT)  Observation guided constitutive modelling for creeping landslides	
10:15-10:40	Coffee Break	
10:40-10:55	<b>Prof. Božidar Stojadinović</b> (IBK)  Earthquake (and natural hazard) resilience of communities	
10:55-11:10	<b>Dr. Marco Broccardo</b> (IBK)  Uncertainties in seismic hazard and risk analyses: the good, the bad and the way ahead	
11:10-11:25	<b>Prof. Markus Rothacher</b> (IGP) Contributions of GNSS to earthquake hazard monitoring and assessment	
11:25-11:40	<b>Prof. Alain Geiger</b> (IGP)  Determination of tectonic and landslide strain patterns from geodetic deformation observation and analysis	
11:40-11:55	<b>Daisy Lucas</b> (IGT) Study of the seasonal response of a steep scree slope in the Swiss Alps	
11:55-12:10	Prof. Jan Carmeliet (ITA/D-BAUG)	

3D DEM study of stick-slip in granular fault gouge; effect of vibration and

Summary panel on landslides and earthquakes

12:10-12:25

12:25-13:30

## **Afternoon Programme**

Session 2 - Floods and Cryosphere-related Hazards		
13:30-14:00	Prof. Günter Blöschl (Technical University Vienna - Invited) Understanding flood regime changes in Europe	
14:00-14:15	Prof. Bryan T. Adey (IBI) Challenges in assessing road related risk to plan risk-reducing interventions	
14:15-14:30	<b>Dr. João P. Leitão</b> (IfU/Eawag)  The potential of new data sources to improve urban flood modelling	
14:30-14:45	Elena Leonarduzzi (IfU) Forecast and warning concept for landslides in Switzerland based on rainfall triggering thresholds and multiscale hydrological modelling	
14:45-15:00	<b>Samuel J. Peter</b> (VAW)  GPU accelerated BASEMENT enabling Monte-Carlo simulations for flood risk analysis	
15:00-15:25	Coffee Break	
15:25-15:55	<b>Prof. Michael Krautblatter</b> (Technical University of Munich - Invited)  Destabilization of permafrost slopes: Mechanical modelling approaches and application to high-alpine infrastructure	
15:55-16:10	<b>Prof. Andreas Wieser</b> (IGP) Terrestrial remote sensing of glaciers using laser scanning and radar interferometry	
16:10-16:25	Fabian Lindner (VAW) Seismic monitoring of the 2016 outburst flood of Lac des Faverges on Glacier de la Plaine Morte	
16:25-16:40	Ana Stritih (IRL) Quantifying avalanche protection in forests using remote sensing	
16:40-16:55	Summary panel on floods and cryosphere-related hazards	
Conclusion		
16:55-17:10	Conclusions and end of workshop	
17:10	Apéro	