International Conference on Natural Hazards and Risks in a Changing World

Thursday, 4th October 2018

8:00 – 9:00  Registration
9:00 – 9:30 Welcome and opening by Oliver Günther (president of UP)
9:30 – 10:15 **Keynote Speech “Changing systems” by Prof. Hans Joachim Schellnhuber** *(Potsdam Institute for Climate Impact Research (PIK) Potsdam)*, Moderation: Prof. Axel Bronstert
10:15 – 10:45 Coffee break
10:45-12:45 Parallel sessions „Changing systems: Hydro-Climatological Hazards“ and „Changing systems: Geophysical Hazards“

<table>
<thead>
<tr>
<th>Session 1: „Changing systems: Hydro-Climatological Hazards“ (Convener: Dr. Heidi Kreibich)</th>
<th>Session 2: „Changing systems: Geophysical Hazards“ (Convener: Prof. Fabrice Cotton)</th>
</tr>
</thead>
</table>
| 10:45-11:05 Martins, Eduardo Sávio Passos Rodrigues, Prof., Fortaleza, Brazil  
*Development of Droughts in Brazil in the last years* (invited Talk) | Krawczyk, Charlotte, Prof., Potsdam, Germany  
*Sinkhole characterization with supplementing geophysical methods: the joint project SIMULTAN*
|
| 11:05-11:25 Schulze, Roland, Prof., Pietermaritzburg, South Africa  
*From Fire to Frosts to Floods, and from Droughts to Diseases to Discomfort: Prognoses into the Future of Climate Drivers in an Already Climate Stressed South Africa* | Bayona Viveros, José Antonio, Msc., Berlin, Germany  
*A regionalized strain-rate based seismicity model for subduction zones*
|
| 11:25-11:45 Krishnapillai, Shadananan Nair, PhD, Kochi, India  
*Increasing severity of floods associated with changing climate in the coastal megacities of India* | Ziebarth, Malte Jörn, Msc., Potsdam, Germany  
*A Physics-Based PSHA Conceptual Workflow for Low-Strain Areas*
|
| 11:45-12:05 Mosimann, Markus, Bern, Switzerland  
*Flood risk (d)evelopment: disentangling key drivers of flood risk change with a retro-model experiment* | Kotha, Sreeram Reddy, Msc., Potsdam, Germany  
*Variabilities and Uncertainties in Seismic Ground-Motion Prediction: Implications on Seismic Hazard Assessment*
|
| 12:05-12:25 Piroth, Klaus, Dr., Alsbach, Germany  
*The influence of transient flood risk factor on the expectation of loss* | Razafindrakoto, Hoby, Dr., Potsdam, Germany  
*Coupling Empirical and Simulation-based Ground Motion Model*
|
| 12:25-12:45 Bronstert, Axel, Prof., Potsdam, Germany  
*Flash-Floods: more often, more severe, more damaging? An analysis of hydro-geo-environmental conditions and anthropogenic impacts* | Öztürk, Uğur, Msc. Potsdam, Germany  
*Learning more to predict landslides in different scales (Regional to local)* |
12:45 – 14:00 Lunch

14:00-14:45 Keynote Speech “Linking hazard and vulnerability” by Prof. Jeroen Aerts (VU Amsterdam, Institute for Environmental Studies), Moderation: Prof. Annegret Thieken

14:45-16:00 Poster session (incl. coffee break)

16:00-18:00 Parallel sessions „Linking Hazard and Vulnerability“ and „Modelling and Data“

<table>
<thead>
<tr>
<th>Session 3: „Linking Hazard and Vulnerability“ (Convener: Prof. Ariane Walz)</th>
<th>Session 4: „Modelling and Data“ (Convener: Dr. Gert Zöller)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:00-16:20 Straub, Daniel, Prof., Munich, Germany Adaptable complexity to manage natural hazards in an uncertain future</td>
<td>Ulbrich, Thorsten, Dr., Kleinmachnow, Germany EMRA: A Decision support system for monitoring, warning and risk assessment of climate extremes for agriculture</td>
</tr>
<tr>
<td>16:20-16:40 Kron, Wolfgang, Dr., Neuried, Germany Efficiency of flood protection measures</td>
<td>Bürger, Gerd, Dr., Potsdam, Germany Sub-hourly extreme rainfall scenarios (following Clausius-Clapeyron)</td>
</tr>
<tr>
<td>16:40-17:00 Sillmann, Jana, Dr. Oslo, Norway Translating flood disasters into the future: a storyline approach to build flood resilience</td>
<td>Sieg, Tobias, Msc., Potsdam, Germany Damage estimation for hydro-meteorological hazards at seamless spatial scales</td>
</tr>
<tr>
<td>17:00-17:20 Baldassarre, Giuliano, Prof. Uppsala, Sweden Human influence and response to socio-natural hazards</td>
<td>Assmann, André, Dr., Heidelberg, Germany Basic European Assets Map, a Copernicus Service addressing cross border activities</td>
</tr>
<tr>
<td>17:20-17:40 Kreibich, Heidi, Dr., Potsdam, Germany What approaches and data are needed to better understand trends in drought and flood impacts?</td>
<td>Göber, Martin, Dr., Berlin, Germany Forecasting Weather Related Fire Brigade Operations by linking meteorological forecasts with vulnerability indicators</td>
</tr>
<tr>
<td>17:40-18:00 Rodda, Harvey, Dr., Chalgrove, UK The 1968 floods in South-East of the United Kingdom: A 50 Year Retrospective</td>
<td>Bergner, Andreas, Dr., Potsdam, Germany Improving hazard communication using online map services and interactive visualization approaches: experiences from cooperation with administration partners in Saxony (Germany), Argentina and Colombia</td>
</tr>
</tbody>
</table>

18:00 End of Plenary
19:00 Conference Dinner
20:00 Dinner speech by Prof. Frank Scherbaum
Friday, 5th October 2018

9:00 – 9:45  **Keynote Speech “Data Science” by Prof. Matthias Holschneider** (University of Potsdam, Institute of Mathematics), Moderation: Prof. Frank Scherbaum

9:45 – 10:00  **DKKV Award „prepardness 2030“**, Moderation: Prof. Frank Scherbaum

10:00 – 10:30  Coffee break

10:30 – 12:30  Parallel sessions „Exposure and Risk Management“ and „Data Science and Information Systems“

<table>
<thead>
<tr>
<th>Time</th>
<th>Session 5: „Exposure and Risk Management“ incl. awardee (Convener: Prof. Annegret Thieken)</th>
<th>Session 6: „Data Science and Information Systems“ (Convener: Dr. Kristin Vogel)</th>
</tr>
</thead>
</table>
| 10:45-11:05   | Lange, Stefan, Dr., Potsdam, Germany  
*Climate impact simulations indicate that historical warming has at least tripled global population annually exposed to extreme events* | Bedford, Jonathan, Msc., Potsdam, Germany  
*Developing Machine Learning Approaches for the Seismological data in Northern Chile*

<table>
<thead>
<tr>
<th>Time</th>
<th>Session 6: „Data Science and Information Systems“ (Convener: Dr. Kristin Vogel)</th>
</tr>
</thead>
</table>
| 11:05-11:25   | Torresan, Silvia, Dr., Venice, Italy  
*Assessing sea level rise risks in changing coastal environments: a national assessment supporting disasters management and climate change adaptation* |
| 11:25-11:45   | Fiedler, Bernhard, Msc., Potsdam, Germany  
*Change-point detection for seismicity parameter*

<table>
<thead>
<tr>
<th>Time</th>
<th>Session 6: „Data Science and Information Systems“ (Convener: Dr. Kristin Vogel)</th>
</tr>
</thead>
</table>
| 11:45-12:05   | Steger, Stefan, Dr., Bolzano-Bozen, Italy  
*Why omnipresent input data flaws may hamper a dynamic perspective in data-driven landslide susceptibility modelling* |

<table>
<thead>
<tr>
<th>Time</th>
<th>DKKV awardee</th>
</tr>
</thead>
</table>
| 12:25-12:45   | Schüller, Lynn, Msc., Bonn, Germany  
*ESPRESSO: Enhancing synergies for disaster prevention in the European Union* |
| 12:30 – 13:30 | Lunch                                                                                                                                                                               |

<table>
<thead>
<tr>
<th>Time</th>
<th>Poster Session (incl. coffee)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:30-14:30</td>
<td></td>
</tr>
</tbody>
</table>

14:30-15:15  **Keynote Speech “Cascade and Multi-Hazard” by Prof. Jakob Rhyner** (United Nations University, Institute for Environment and Human Security), Moderation: Prof. Oliver Korup
15:15-16:15 Session „Cascade and Multi-Hazard“

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:15-15:35</td>
<td>Geiß, Christian, Dr., Oberpfaffenhofen, Germany</td>
<td>From single-hazard to multi-hazard risk assessment including the analysis of dynamic exposure and vulnerability aimed at the modelling of cascading effects</td>
</tr>
<tr>
<td>15:35-15:55</td>
<td>Pittore, Massimiliano, Dr., Potsdam, Germany</td>
<td>Perspective and limitations of Multi-Risk Assessment</td>
</tr>
<tr>
<td>15:55-16:15</td>
<td>Tilloy, Alois, Msc., London, UK</td>
<td>Towards an event-based quantitative model for interacting hazard events</td>
</tr>
</tbody>
</table>

16:15-17:00 Discussion and Goodbye (Prof. Annegret Thieken and Prof. Axel Bronstert)