

## Panta Rhei at EGU 2017

Dear IAHS members,

The deadline for EGU 2017 abstract submissions is 11 Jan 2017, and many sessions are being organized through the Panta Rhei IAHS decade. We hope you will consider submitting your abstract to one of these sessions: we have an overarching Panta Rhei session “HS1.2 Hydrology, society and environmental change” and 6 sessions organized by our working groups. Brief introductions to all the sessions are given below.

We also provide an early announcement of the 2nd “Panta Rhei Day” workshop on 23 April at TU Vienna (the Sunday just prior to EGU). This workshop will contain a mix of invited talks and interactive activities, following the format of last year’s successful workshop. Please put it in your diaries, further information to follow.

See you at EGU!

Hilary McMillan, Panta Rhei Chair 2015-2017

### HS1.2 Hydrology, society and environmental change

Conveners: Hilary McMillan, Heidi Kreibich, Anne Van Loon, Tobias Krueger

This session welcomes abstracts that consider how to measure, model and analyse interactions of people and water, and the effects of human and environmental changes on hydrological systems. Panta Rhei promotes this overarching session for all scientists working in the areas of hydrology, society and change, particularly focusing on gains in our understanding of human-influenced hydrological systems during the second biennium of Panta Rhei 2015-2017.

The image is a promotional banner for the EGU 2017 General Assembly. It features the EGU logo (a yellow circle with 'EGU' inside) on a blue background. Text includes 'CALL FOR ABSTRACTS', 'European Geosciences Union General Assembly 2017', and 'Vienna | Austria | 23-28 April 2017'. Below this, a red box contains session details: 'Session HS1.2 Hydrology, society and environmental change', a topic description, conveners' names, and submission information. To the right is a circular logo for 'Panta Rhei' with 'IAHS' and 'AISH' in the center, and 'Everything Flows' around the bottom. Below the logo is the text 'Change in Hydrology and Society'.

<http://meetingorganizer.copernicus.org/EGU2017/abstractsubmission/23734>

### HS2.1.1 Hydrological extremes: from droughts to floods

Conveners: Anne Van Loon, Jan Szolgay, Lena M. Tallaksen, Gregor Laaha, Alberto Viglione

High and low flows and associated floods and droughts are extreme hydrological phenomena caused by meteorological anomalies and modified by various catchment processes and human activities. The scope of this general session on hydrological extremes is to learn from

the similarities and differences of basic ideas and concepts for both extremes, from generating physical processes and feedbacks to monitoring and modelling approaches. This session is jointly organised by the Panta Rhei Working Groups “Understanding Flood Changes”, “Changes in Flood Risk”, and “Drought in the Anthropocene”.

<http://meetingorganizer.copernicus.org/EGU2017/abstractsubmission/22955>

### **HS2.4.2 Flood dynamics: processes, controls, consequences**

Conveners: Sergiy Vorogushyn, Heidi Kreibich, Alberto Viglione, Luis Mediero, William Farmer

The recurrence of decadal periods of enhanced/reduced floods in many regions in the world has gained increasing interest of the hydrologic research community. The scope of this session is to report when, where, how (detection) and, more importantly, why (attribution) changes in flood hazard and risk occur; particularly what drivers are responsible for that. This session is jointly organised by the Panta Rhei Working Groups “Understanding Flood Changes” and “Changes in Flood Risk”.

<http://meetingorganizer.copernicus.org/EGU2017/abstractsubmission/22968>

### **IE2.2/HS3.3/ESSI3.11/GI1.13. Addressing the people-hydrology nexus: opportunities and challenges for hydrology with public participation and crowdsourcing**

Conveners: Elena Toth, Linda See, Nick Mount, Amin Elshorbagy, Maurizio Mazzoleni

This session explores how data-driven hydrological systems models may be enhanced by incorporating data and information that can help to reveal and describe the complex feedbacks between people (e.g. as water users and decision-makers) and the hydrological system. Within the framework of the new scientific decade 2013-2022 of IAHS, 'Panta Rhei - Everything Flows, Change in Hydrology and Society', we are keen to examine the opportunities and challenges that hydrological measurements sourced through citizen science and crowd sourcing approaches offer.

<http://meetingorganizer.copernicus.org/EGU2017/abstractsubmission/23925>

### **HS5.1 Hydrology & Society: Transdisciplinary approaches to hydrology and water resources management**

Conveners: Stuart Lane, Tobias Krueger, Eric Lindquist, Eva Nora Paton, Gemma Carr, Roland Barthel, Leon Hermans, Carly Maynard, Christopher (Kit) Macleod

A scientific decade on change in hydrology and society requires the perspectives of those disciplines that have traditionally been concerned with society, the social sciences, as well as of society itself. Understanding how these perspectives can be combined with hydrological perspectives to create new ways of approaching socio-hydrological questions is the aim of this session. This session is organised by the Working Group "Transdisciplinarity" of IAHS' scientific decade on change in hydrology and society "Panta Rhei".

<http://meetingorganizer.copernicus.org/EGU2017/abstractsubmission/22979>

### **HS5.3 Advances in socio-hydrology**

Conveners: Saket Pande, Murugesu Sivapalan, Giuliano Di Baldassarre, Alberto Viglione

The session aims to reconcile socio-hydrology with other fields such as hydro-sociology, hydro-economics and integrated water resources management. Socio-hydrology proposes to understand coupled human-water systems by conceptualizing its components to be dynamically connected by bi-directional feedbacks. The session therefore aims to trigger a discourse on understanding such systems at a diversity of scales. This session is jointly developed with the framework of the Panta Rhei Research Initiative under the working group of “Socio-hydrological modeling and synthesis”.

<http://meetingorganizer.copernicus.org/EGU2017/abstractsubmission/22981>

## **HS7.4 Climatic variability and the hydrological cycle**

Conveners: Ioannis Markonis, Demetris Koutsoyiannis , C. Cudennec , João de Lima , Alberto Montanari , Serena Ceola

What can hydrology offer to climate science, and vice versa, and what is their connection to the ever-changing human societies? The objectives of this session include the investigation of the water cycle and climatic variability both in regional and planetary scale, the exploration of the effect of scale in hydrological and climatic processes, and the advancement of our understanding of the hydrological cycle. This session is related to the new scientific decade 2013–2022 of IAHS, entitled “Panta Rhei - Everything Flows”.

All presentations in our session will be promoted by our [website](#), which has already reached 3000 visits and 200 subscribers in the very first month since its release. In addition, a short summary of earlier work with selected papers will be included for each of the first authors if they agree.

<http://meetingorganizer.copernicus.org/EGU2017/abstractsubmission/22996>