

# Vienna Catchment Science Symposium, Saturday 3<sup>rd</sup> May, 2025

## On the Theme of: Hydrological Scaling Revisited

12<sup>th</sup> Symposium

Hydrological observations and process studies are usually conducted at small spatial scales, while water management decisions, and the models that support them, are needed at larger, landscape scales. The methodological challenge of bridging this scale gap has attracted a lot of research in the 1980s and 1990s, but has received less attention in recent years, even though the issue persists. The aim of this symposium is to explore the conceptual foundations of the topic in light of recent advances in measurement and modelling approaches, and to identify potential directions for future research on addressing the scaling problem.

<u>Time</u>	<u>Session</u>	<u>Location</u>
8:30	Tea, coffee, pastries and greetings	Prechtlsaal
8:45	<b>Welcome and Introduction</b> Günter Blöschl, TU Wien, Austria   University of Bologna, Italy	Prechtlsaal
9:00	<b>Hydrological scaling: Taking stock and looking ahead</b> Günter Blöschl, TU Wien, Austria   University of Bologna, Italy	Prechtlsaal
10:10	Tea and coffee	Prechtlsaal
10:45	<b>Structure and organization as scaffolds for upscaling</b> Sally Thompson, University of Western Australia	Prechtlsaal
11:55	Short break	
12:00	<b>Novel scaling approaches in physically based models</b> Harrie-Jan Hendricks Franssen, Forschungszentrum Jülich, Germany	Prechtlsaal
13:10	Lunch	Prechtlsaal
14:15	<b>Scaling, where to go from here?</b> Tissa Illangasekare, Colorado School of Mines, USA	Prechtlsaal
14:35	<b>Small group discussion sessions</b>  Group 1: <b>Towards a general scaling framework of rainfall-runoff processes</b> Aim: to brainstorm what universal conceptualisations could contribute to a scaling framework of model equations and parameters that link local, hillslope and catchment scales. Moderator: Alberto Viglione	Prechtlsaal

<u>Time</u>	<u>Session</u>	<u>Location</u>
	<p><b>Group 2: Framing the testing of scaling relationships</b></p> <p>Aim: to brainstorm the methods (data, models, frameworks) required to explore whether hydrological scaling relationships are suitable for transferring information across spatial scales.</p> <p>Moderator: Harrie-Jan Hendricks Franssen</p>	Seminar room AD0309 (3 <sup>th</sup> floor)
16:00	Tea and coffee	Prechtlsaal
16:30	<b>Plenary: Exchange of group findings</b>	Prechtlsaal
17:30	Evening drinks reception followed by dinner	Prechtlsaal

Location: Prechtlsaal, TU Wien. Karlsplatz 13, 1040 Vienna



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