WSL Distinguished Lectures

Monday, 28 August 2023 | 10.30–11.30 | Bi

Daniela Thrän

Departement Bioenergie, Helmholtz-Zentrum für Umweltforschung, Leipzig, Deutschland

The possible contribution of biological resources in net zero systems: the bioeconomy approach

Bioeconomy envisions the sustainable production and utilization of biological resources to provide products and services to all trade and industry sectors. This talk will critically reflect the opportunities and challenges of bioeconomy in Germany as a substantial contribution to the net zero targets in the next decades. To this end, a wide variety of processes – from open fireplaces to synthetic biology – and actors need to be coordinated based on a coherent strategy and implementation plan.

Tuesday, 5 September 2023 | 10.30–11.30 | Bi

Francis Martin

Interactions Arbres-Microorganismes, INRAE, Université de Lorraine, France

Harnessing genomics to unfold evolution of forest fungi and map fungal networks

I will highlight the main insights that have been gathered from large-scale genomics of fungi inhabiting forests, focusing on the evolution of ectomycorrhizal fungi. I will also report on our recent effort to map fungal networks and their gene expression in upper montane subtropical forests.

Tuesday, 24 October 2023 | 10.30–11.30 | Bi

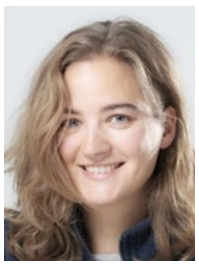
Matthias Egger

Swiss National Science Foundation SNSF, Bern, Switzerland

Open access: the good, the bad and the ugly?

In recent years, Open Access (OA) publishing has experienced rapid growth, witnessing the emergence of numerous new publishers and journals. In this talk, I will explore the benefits, challenges, and potential pitfalls of OA publishing from the perspectives of both an active researcher and a research funder. I will briefly revisit the well-rehearsed arguments for OA and discuss some challenges and abuses, such as peer review quality or predatory practices. Finally, I will conclude with a discussion of best practices and alternative publishing models.

Mittwoch, 29. November 2023 | 10.30–11.30 | Bi



Charlotte Laufkötter

Climate and Environmental Physics, Universität Bern, Schweiz

Plastik-Endlager Ozean? Ursachen und Auswirkungen mariner Plastikverschmutzung

Plastikpartikel sind in allen Weltmeeren gesichtet worden. Berichte von Walen mit Plastiktüten in den Mägen oder von Robben, die in ausrangierten Netzen verfangen sind, sind auf social media zu finden. Aber wieviel Plastik ist im Ozean, wo sammelt es sich an, und was sind die Konsequenzen für marine Organismen?

Tuesday, 16 January 2024 | 13.15–14.15 | Bi

Julia Steinberger

Faculty of Geosciences and Environment, Université de Lausanne, Switzerland

10 stylized facts about Living Well Within Limits

The Living Well Within Limits project investigated the energy requirements of well-being from different perspectives. Cross-cutting findings will be presented. This covers the current and future energy requirements of wellbeing, their unequal distribution, the crucial role played by provisioning systems and public services, the importance of political economy approaches, and the necessity to consider transformations beyond capitalism. This includes upcoming research on post-growth economies. I thus argue for the active (as in activist) engagement of the research community.

Vortragsorte
WSL Birmensdorf (Bi), Englersaal, oder SLF Davos (Da), Hörsaal, bzw. Zoom-Webinar

Eidg. Forschungsanstalt WSL
Zürcherstrasse 111, 8903 Birmensdorf
www.wsl.ch

Dienstag, 23. Januar 2024 | 10.30–11.30 | Bi

Michael Reinhard

Bundesamt für Umwelt, Abteilung Wald, Bern, Schweiz

Bedürfnisse des BAFU, Zusammenhang von wissenschaftlichen Daten, Veröffentlichungen und Politik

Forschung und Verwaltung kommunizieren über verschiedenste Themen: Forschungsresultate, Politik, fachliche Wissensvermittlung und Sensibilisierung und vieles mehr. Damit die unterschiedlichen Kommunikationsbedürfnisse erfüllt werden könnten, braucht es eine gute Abstimmung und Umsetzung. Wissenschaftliche Findings müssen beispielsweise «übersetzt» werden, damit sie für das Zielpublikum wie Medien, Bevölkerung und Politik verständlich sind und einheitlich darüber kommuniziert wird - eine Auslegeordnung aus Sicht des Bundes.

Tuesday, 6 February 2024 | 10.30–11.30 | Bi

Erich Fischer

Institut für Atmosphäre und Klima, ETH Zürich, Schweiz

Probing the Unfathomable: Physical Climate Storylines of Unseen Extremes

Recent unprecedented heat and heavy rainfall extremes broke previous observed record intensities by large margins. Given their unprecedented intensity some media outlets and scientists raised the question whether extremes intensify faster than projected. Here I address this question and highlight some of the challenges such events pose to widely used methods in model evaluation and attribution. Furthermore, I discuss ways forward in quantifying the potential intensity of future record-shattering events.

Tuesday, 26 March 2024 | 10.30–11.30 | Bi

Stephan Pauleit

Lehrstuhl für Strategie und Management der Landschaftsentwicklung, Technische Universität München, Germany

Green City of The Future: Climate Resilient Neighbourhoods in Growing Cities

Climate change threatens cities particularly through increasing frequency and intensity of heat waves, rainstorms and droughts. Green infrastructure is seen as a key measure for urban climate change adaptation. What potential does it really have and how should it be designed? How can the conflict between densification in growing cities and the development of green infrastructure be resolved? The lecture will present results from research projects at the Centre for Urban Ecology and Climate Adaptation at the Technical University of Munich.

Thursday, 16 May 2024 | 10.30–11.30 | Bi

Hans-Jörg Vogel

Helmholtz Zentrum für Umweltforschung, Halle, Germany

The soil bio-physical complex and soil functions

Soils are not only the basis for the production of food and other raw materials, they also store and filter water, store carbon and harbour an overwhelming biodiversity. This multifunctionality emerges from complex interactions of small scale biological, physical and chemical processes. In this presentation we discuss how such processes can be represented in a systemic soil model that allows to predict the impact of soil management and climate change on soil functions and their dynamics at the scale of landscapes.

Tuesday, 4 June 2024 | 10.30–11.30 | Da

Philip Deline

Equipe Morphodynamiques, Université de Savoie Mont Blanc, France

Climate-induced changes in the Alpine cryosphere and their geomorphic impacts

As in all the mountains of the world, the snow, glaciers and permafrost of the European Alps are undergoing major changes in relation to the current global change. After presenting a picture of this evolution of the cryosphere, which has been accelerating since the 1990s, all the more so as the mountains are more affected by the global warming, we will show its effects on geomorphic processes such as rock fall, rock and ice avalanches, debris flows, moraine failure, or lake dynamics.

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