

### **Program**

17 October Jürgen Vollmer

#### Introduction

What are "Competences for Sustainable Development"? What do we try to teach in the present course?

24 October Veit Polowy

### 17 Goals for Sustainable Development?

What are the 17 UN Goals for Sustainable Development? What is their use when they will not be achieved?



7 November Christian Wirth

### Biodiversity loss and climate change as one crisis: mechanisms and solutions

Why do we need a systems approach to analyze the biodiversity and climate crisis?

14 November Heide Glaesmer

### Armed conflict, forced migration, and mental health

How do armed conflicts matter? What are their long-term consequences?

21 November Immo Fritsche

### "We" make(s) a difference: The social psychology of climate action

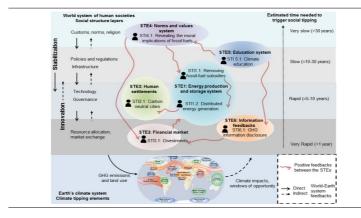
What is causing change of behavior? How can we reach agreement about climate actions?

28 November Manuel Burghardt

### **Digital Environmental Humanities (DEH)**

Which tools and methods does DEH contribute to address ethical-technical-environmental dilemmas?

How does it promote "out of the box" thinking?



5 December

Martin Pfeffer

### Climate change and health risks due to invasive hematophagous arthropods

Which species will we encounter in the near future? How will they change our lives?

12 December

Christoph Zielhofer

### Fluvial Anthropospheres: perspectives of sustainable land-use

What do we know about the magnitude and frequency of hydrological extremes? How do socioeconomic path dependencies prevent sustainable development in floodplains?

19 December

Nico Wunderling

### Tipping elements in climate and society

What are the long-term consequences of our actions? How do changes of behavioral patterns come about?



9 January

Andreas Huth

### Global forests and their role in the global carbon cycle

What do we know about forest growth and biodiversity? How do forests interact with the climatic system?

16 January

Mira Pöhlker

#### Aerosols as climate driver

What is the role of aerosols and clouds in the climate system? How do their properties change due to human and natural impacts?

23 January

Mariana M. de Brito

# Large language models in the understanding of the systemic impacts of extreme events

How does unstructured text data reveal actionable information about systemic socio-economic impacts of climate hazards? What do they tell about responses and adaptation measures?

30 January

Birgit Scheps-Bretschneider

#### Steps toward decolonisation

How do we reach a global, rather than a Eurocentric, perspective? How can current research in Ethnology contribute to such a change of perspective?



6 February

Symposium with Poster Session

### LINE

The Leipziger Initiative für Nachhaltige Entwicklung (LINE) was founded in 2021 to empower students to digest and analyze complex interlocking crises associated with sustainability from multiple perspectives, to scrutinize quantitative models that address these problems, and to develop, evaluate, and implement solution strategies based on this assessment. The Ars legendi-Prize for Excellent Higher Education 2023 of the Stifterverband für die Deutsche Wissenschaft e.V. was awarded to Dr. Annett Kaldich for initiating the network and the forthcoming teaching activities.

### Ringvorlesung

Based on case studies of current research the participants will learn to perceive of sustainability as an issue of interlocking crises, analyze them from multiple perspectives, and to digest how quantitative modeling and predictions help in this endeavor.

The Ringvorlesung can be taken as

- SQ Module (5CP) at the Leipzig University
- Studium generale at the HTWK Leipzig
- implementation at the HTW Dresden and TU Chemnitz proceeds via the TrafoSax cooperation

### Certificate

Participants of the **foundation module (10CP)** of the Certificate "Competences for Sustainable Development" follow the Ringvorlesung and two workshops where they consolidate their understanding in further lectures and discussions. On top of that, the curriculum of the certificate comprises another lecture and a capstone project where they participate in and contribute to a Living Lab.

### Venue

Lectures will take place in the

Hörsaal Theoretische Physik

Linnéstr. 5 — stop Johannisallee of tram lines 2, 16

or bus line 60



Enter through the North entrance into the physics-building, take the staircase to the 1<sup>st</sup> floor, turn right along the floor, and enter the lobby of the lecture hall through a glass door.

### **Post Lecture Discussions**

After the lectures there will be time for informal discussions and preparation of forthcoming sessions.







course wiki

certificate

LINE initiative

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above 7 November: cover page of Pörtner, et al. Scientific outcome of the IPBES-IPCC co-sponsored workshop on biodiversity and climate change; IPBES secretariat, Bonn (2021), CC BY-SA 4.0.
above 5 December: Fig. 3 of Otto, et al, Proceedings of the National Academy of Sciences, 117 (2020) p. 2362, CC BY-SA 4.0.
above 9 January: detail of William Turner's painting "Fighting Temeraire" from 1838, shortly after the Tambora eruption in 1815 (public domain).



# UNIVERSITÄT LEIPZIG

Leipziger Initiative für Nachhaltige Entwicklung

# Ringvorlesung

# **Competences for Sustainable Development**



WiSe 2024/25

SQ Module 12-SQM-64 foundation module -BMWBNE1 of the certificate "Competences for Sustainable Development"

Thursday, 5:15 pm Hörsaal für Theoretische Physik

