

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

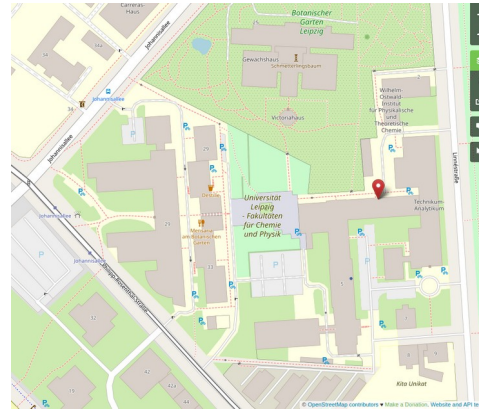
- **SQ Module (5CP)** at the Leipzig University
- **Studium generale** at the HTWK Leipzig
- implementation at the HTW Dresden and TU Chemnitz proceeds via the TrafoSax cooperation

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 1st 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 Program: Stockholm Resilience Centre, CC BY-ND 3.0.
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).



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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





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

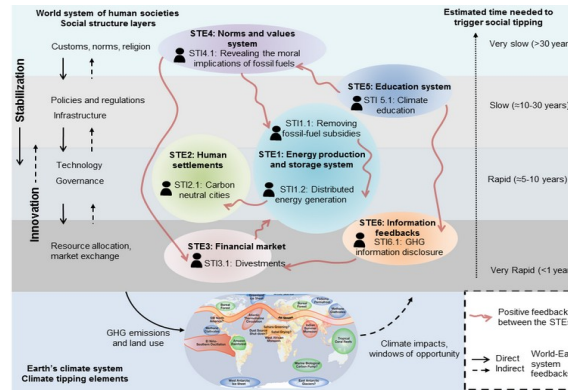
“We” make(s) a difference: The social psychology of climate action

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

28 November Manuel Burghardt

Digital Environmental Humanities (DEH): An overview of recent nature-culture-computer entanglements

What are current perspectives on DEH? How can digital humanities tools and methods support research in the environmental humanities?



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 impact?

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 does the restitution debate change our perspective on sustainability – and how does it help us to reach global, rather than Eurocentric, perspectives?



6 February Symposium with Poster Session