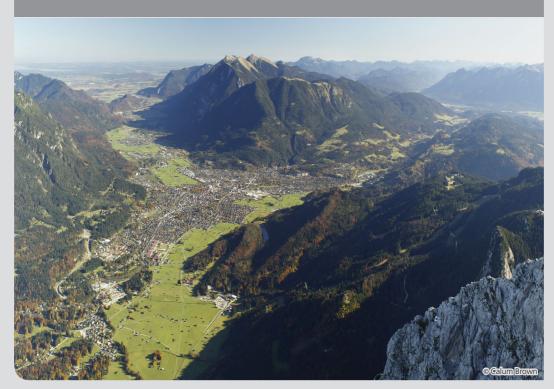




Summer School Land Use and Ecosystem Change

20-27 August 2019, Garmisch-Partenkirchen, Germany





The Karlsruhe Institute of Technology (KIT) will run an international Summer School on the topic of land use and ecosystem change during August 2019 at the KIT-Campus Alpin, IMK-IFU (Garmisch-Partenkirchen). Master and doctoral students are invited to learn about and discuss a wide range of issues related to ecosystem functioning, socio-ecological systems and land use change, in particular:

- 1. Both the biophysical and human processes and concepts needed to understand the broader issues of socio-ecological systems. This includes ecosystem functioning, biodiversity, ecosystem services, resilience, vulnerability, risk management, tipping-points, sustainability and related concepts in the field. We will also explore current understanding of how physical and human environmental changes affect socio-ecological systems, including content on international assessment processes such as the IPCC and IPBES.
- 2. Different aspects of land use change processes across geographic scales and for the past, present and future drivers of change. This will include, for example, land abandonment, extensification vs. intensification, deforestation, the role of social networks and knowledge diffusion, the role of pollinators and land management. There will be a focus on land use change assessment methods, including the role of observational data (e.g. from remote sensing and other sources) and land use modelling approaches using interactive exercises and case studies.

Format: The summer school will include a mix of lectures, practical exercises with student presentations and a field excursion. Participation is limited to a max. of 35 students. The cost for travel and accommodation is the student's own responsibility; KIT will cover lunches, materials and the field excursion.

Lecturers (KIT): Prof. Dr. Almut Arneth, Prof. Dr. Mark Rounsevell, Dr. Richard Fuchs, Dr. Sam Rabin, Dr. Heera Lee, Dr. David Martin Belda, Dr. Calum Brown, Dr. Verena Seufert, Dr. Penelope Whitehorn, Dr. Anita Bayer, Dr. Bumsuk Seo. External keynote speakers not yet confirmed.

Applications: Application deadline is 31 March 2019. Please send a CV and a letter of motivation (limited to one page), signed by your supervisor, to: sylvia.kratz@kit.edu. Successful applicants will be notified in April 2019.



Day 1	Introduction
20.08.	Past & present land use change
	Practical on drivers & processes of land use change
	Practical on global ecosystem functioning
Day 2	Observational data of land use change
21.08.	Practical on observational land use change data
	Practical continued incl. report & discussion
Day 3	Land use change modelling
22.08.	Practical on land use change modelling services
	Practical continued incl. report & discussion
Day 4	a) Ecosystems & land use change
23.08.	b) Ecosystem functioning & ecosystem services
	Practical continued incl. report & discussion
Day 5	Field trip to local farms
24.08.	
Day 6	Free time
25.08.	
Day 7	Species & biodiversity
26.08.	Practical on landscape scale analyses of species and biodiversity
	Practical continued incl. report & discussion
Day 8	Socio-ecological systems
27.08.	Practical on people, biodiversity & ecosystem
	Practical continued incl. report & discussion
	Wrap-up and close



Contact

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This summer school contributes to the Global Land Programme (GLP) and the Analysis & Integrated Modelling of the Earth System (AIMES) project of Future Earth.

Issued by

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