

**\*\*\* Advanced notice \*\*\***

**Summer School on *Ecosystems and Land Use Change***

***Garmisch-Partenkirchen, Germany***

***7-14 August 2018***



**Overview:** Food and bioenergy demands of a growing global population and societies' changing lifestyles are increasing the pressures on land and ecosystems. Further pressures arise from the demands on land resources for other ecosystem services, and the variable (often negative) impacts of climate change on plant productivity. These multiple, often seemingly conflicting demands on land and ecosystems are a considerable stumbling-block for achieving sustainability goals. The Karlsruhe Institute of Technology will run an international Summer School on the topic of *ecosystems and land use change* during August 2018 located at the Campus Alpin of IMK-IFU (Garmisch-Partenkirchen). The summer school will introduce masters and doctoral students to a wide range of issues related to ecosystem functioning, socio-ecological systems and land use change by covering:

1. Both the biophysical and human processes and concepts needed to understand the broader issues of socio-ecological systems. This will include, amongst others, 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 environmental

change (both physical and human changes in the environment) will affect socio-ecological systems. This will include content on international assessment processes such as the IPCC and IPBES.



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.

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.

**Format:** The summer school will include a mix of lectures, practical exercises and student presentations and a field excursion in and around the beautiful German Alps. The School is open to students currently studying for an MSc or PhD degree with backgrounds in, for example, environmental sciences, geography, environmental economics, meteorology and ecology. There are 25 student places available in 2018.



**Applications:** Applications will be open from 1 to 31 March 2018. Further information on applying will be posted on the IMK-IFU website (<http://www.imk-ifu.kit.edu>) from 1 March 2018.

**Further information:** Prof Mark Rounsevell ([mark.rounsevell@kit.edu](mailto:mark.rounsevell@kit.edu)) & Prof Almut Arneth ([almut.arneth@kit.edu](mailto:almut.arneth@kit.edu))

This summer school contributes to the Global Land Programme

