Symposium announcement:

**Towards global-scale behavioural models of land use change**

27-29 May 2020, Schloss Herrenhausen, Hannover

This symposium will gather together an international group of researchers to tackle one of the most important challenges facing Earth System Science: the development of large-scale (national/continental to global) land-use models that are based on human behaviour, agency and decision-making processes. The ultimate aim of the work initiated here will be to identify pathways to sustainability that account for fundamental processes in human and natural systems in uncertain future conditions. As such, these pathways are not detectable through current modelling approaches that do not represent the relevant processes. As the new modelling framework develops, it will also support understanding of adaptation and mitigation processes within the land system, and allow this understanding to be transferred to other socio-ecological systems. **Participants will work together towards a common ‘modelling framework’; a conceptual and technical design for integrated behavioural modelling of the land system that reflects the many different ways of understanding and modelling land use change processes.**

In creating an alternative to the current range of ‘top-down’ global models based on macro-economics, the symposium will contribute to development of a working laboratory to test theories of human decision making, and undertake social simulation experiments in a globally connected world. This includes new representations of institutional processes and their relationships with local land users. We also envisage coupling of large-scale, land-use models with other models types, such as Digital Global Vegetation Models (DGVMs), biodiversity models and/or climate emulators to explore a wide range of environmental change drivers and to evaluate the consequences of these for ecosystem services.

The symposium will involve a mix of research presentations, open discussions and informal time for networking and planning.

**We are inviting applications to join this symposium from researchers with an interest in modelling human-nature interactions over large spatial extents.** The symposium links with ongoing international efforts to upscale behavioural models of land use change, and will involve an established group of invited researchers alongside self-nominated attendees. **We are particularly eager to receive applications from early career and female researchers, and from a range of world regions.** Some funding for participation may be available. To apply, please fill in the attached form and return to sylvia.kratz@kit.edu by **30 November 2019**.

Application for participation:

**Towards global-scale behavioural models of land use change**

**Name:**

**Address:**

**Affiliation:**

**Years since PhD:**

**Homepage (URL):**

**Top 5 relevant publications:**

**Do you require funding to participate in the symposium?**

Please note that places in the symposium are strictly limited and may not be available for all applicants. Some funding may be available for participation but can only be guaranteed once applications have been processed. In case of enquiries please contact Sylvia.kratz@kit.edu or calum.brown@kit.edu