



Call for papers

The 5<sup>th</sup> RA [X] ‘Networks’ Workshop

**Theme 2019**

“INNOVATION NETWORKS AND ECONOMIC TRANSITION”

Center for Solar Energy and Hydrogen Research Baden-Württemberg (ZSW)

*in collaboration with*

University of Hohenheim,  
University of Bremen,  
21-22 November 2019, Stuttgart, German

### **Background and objectives**

The structural change of modern economies due to rapid technological advancements is a multifaceted and complex phenomenon and nowadays often discussed as transition towards a knowledge-based economy. In this sense, recent issues challenging the economy and society are for example the global sustainability goals, the energy question, new market structures driven by new technologies, rapid changes through digitalization etc.

Cooperation is one way for firms to cope with an increasing level of complexity in high velocity market environments and outperform competitors. Cooperation enables mutual exchange of knowledge, provides learning platforms and paves the way for collective innovation processes for the actors involved. The sum of micro-level cooperation activities for a well-specified set of actors is reflected in network patterns at higher aggregation levels. Networks can drive – but also hamper – transition processes and are themselves affected by economic transition in various ways. For instance, the creation of new knowledge requires the involvement of new actors and forces at the same time others to leave the field. Contemporary research shows that a broad range of factors plays a role in this context, such as knowledge characteristics, actors’ attributes, institutional settings and regional characteristics. Thus, the study of firm specific cooperation and networks allows us to learn more about the transition processes itself and provides new insight on how firms behave in uncertain environments. At the same time, there is an increasing interest in this topic by political authorities. Transitions can be conceptualized as systemic phenomenon, i.e., a change from one socio-technical system to another. Currently, the transition towards a knowledge-based economy and related socio-economic consequences has become ubiquitous on all policy levels.

Accordingly, the objective of this workshop is to bring together theoretical, conceptual, and empirical research on system dynamics, system failures, systemic interventions and innovation policy design. We welcome presentations in the following exemplary research fields, all of which are able to take a broad and creative individual approach to matters of methodology and their general approach:

**Exemplary research questions:**

- Which factors in innovation networks fuel or might hamper major transition processes?
- How can an innovation systems perspective contribute to the governance of major transformation processes?
- What is the role of different networks actors (e.g. producers, consumers, science organizations, civil society) during the transition process?
- What role do incumbents and what role do start-ups play in transition networks?
- How can we measure the impact of networks on change processes? Which new measures can be applied?
- How can innovation policy react to the challenges related to economic transition?
- Which role does the relationship between urban and peripheral regions play in innovation systems and innovation policy?
- What is the relationship between networks and disruptive innovations?
- How do networks support the product development from niche to mass markets?
- How can innovation systems remain effective when they face disruptive technological change?
- How important are networks for catching-up economies?

Furthermore, we will organize three (parallel) sessions on the following special themes:

- Special Session I.** ‘Virtual simulation labs and simulation techniques’  
(Organizing team: Andreas Pyka, Matthias Mueller, Jessica Birkholz, Kudic Muhamed)
- Special Session II.** ‘Transition from Biotechnology toward Bioeconomy’  
(Organizing team: Daniel Schiller, Muhamed Kudic, Mariia Shkolnykova, Leonard Prochaska)
- Special Session III.** ‘Development and application of network-based indicators in transformative technological fields’ (Organizing team: Tobias Buchmann, Andreas Kladroba, Muhamed Kudic, Katharina Friz, Patrick Wolf)

## Organizational issues

The 5<sup>th</sup> Research Area [X] ‘Networks’ workshop is planned as a two-day event, organized in a workshop atmosphere with thematic paper sessions, presentations by distinguished guest speakers and intense discussions. Non-published work from senior as well as young scholars is highly welcome. We charge a participation fee of € 100 regular, € 50 for PhD students. Participants of the workshop are expected to cover their travel and accommodation costs. Detailed information on the preliminary program as well as on accommodation and travel will be provided on the conference website:

[www.rax2019.info](http://www.rax2019.info)

## Submissions

We invite contributions within the thematic scope described which also address one or more of the research questions outlined above. Please submit a full paper of an extended abstracts (750 words) until 1 September 2019 to: [rax2019@uni-bremen.de](mailto:rax2019@uni-bremen.de)

## Important deadlines

- Abstract submission deadline (max. 500-700 words): 1 September 2019
- Notification of acceptance: 1 October 2019
- Registration deadline: 1 November 2019
- 5<sup>th</sup> EAEPE RA [X] Workshop in Stuttgart: 21-22 November 2019

## Keynote speakers and publication options

We plan to invite two distinguished keynote speakers in the field of complex systems research and innovation policy design to our workshop, i.e.:

- Mark Knell, NIFU, Norway
- tba.

A selected number of high quality papers presented at the workshop will be proposed for further consideration in a **special issue** in a well-recognized **academic journal**, scheduled for **autumn/winter 2020**. All paper submissions will undergo rigorous editorial screening and double-blind peer review by a minimum of two distinguished experts in the field.

## Scientific committee:

Abstract submissions will be evaluated by the following distinguished experts:

- Christian Cordes, University of Bremen, Germany
- Michael Fritsch, FSU Jena, Germany
- Dirk Fornahl, University of Bremen, Germany
- Björn Jindra, Copenhagen Business School, Denmark (tbc)
- Antje Klitkou, NIFU, Norway



- Matthias Müller, University of Hohenheim, Germany
- Daniel Schiller, University of Greifswald, Germany
- Ben Vermeulen, University of Hohenheim, Germany
- Claudia Werker, TU Delft, Netherlands

### **Workshop organization:**

The 5<sup>th</sup> RA [X] 'Networks' Workshop is a joint initiative of the EAEPE Research Area [X] 'Networks' (Stefano Battiston and Muhamed Kudic) and the Research Area [D] 'Innovation and Technological Change' (Andreas Pyka and Ben Vermeulen) and will be realized in cooperation with the Center for Solar Energy and Hydrogen Research Baden-Württemberg (ZSW). This year's workshop is organized by:

- Andreas Pyka, University of Hohenheim, Germany
- Tobias Buchmann, ZSW, Germany
- Jutta Günther, University of Bremen, Germany
- Muhamed Kudic, University of Bremen, Germany

### **Location:**

Center for Solar Energy and Hydrogen Research Baden-Württemberg (ZSW)  
Meitnerstraße 1  
Stuttgart, Germany

Further Information: [www.rax2019.info](http://www.rax2019.info)