



Call for papers

The 4th RA [X] ‘Networks’ Workshop

Theme 2018

“New ways of innovation policy design and its evaluation – insights from complex adaptive systems and beyond”

Andrássy University Budapest,
15-16 November 2018, Budapest

Background and objectives

Today, it is widely recognized that the creation of technological innovations – particularly in knowledge-intensive fields – doesn’t proceed in isolation. Empirical research indicates that innovation processes are characterized by a pronounced division of labor between the actors participating in the economy (Wuchty et al., 2007). In nearly all industries and technological areas we observe a pronounced intensity of R&D cooperation and the emergence of innovation networks with dynamically changing compositions over time (Hagedoorn, 2002; Kudic, 2015; Tomasello et al., 2017).

At the same time, we know that the economic actor’s innovativeness is strongly affected by his or her strategic network positioning and the structural characteristics of the socio-economic environment in which the actor is embedded. In this sense, R&D cooperation and innovation networks (Powell et al., 1996; Kudic, 2015), geographical closeness and other dimensions of proximity (Boschma, 2005), interregional differences in innovation activities (Fritsch, 2000, 2003), industry dynamics (Klepper, 1997), structural change and systemic instabilities Tomasello et al., 2017), path-dependencies and lock-in effects (Arthur, 1989; David, 1985), bounded rationality (Simon, 1955), herding behavior (Kirman, 1993), and self-enforcing system dynamics (Pyka, 1997) alongside with the political and legal constraints (Eckardt forthcoming; Eckardt and Okruch 2018) – to name just a few relevant issues – need to be considered appropriately in order to gain an in-depth understanding of innovation processes.

Although these issues have been proven to play a key role, they are typically neglected in traditional economic models. Systemic approaches (Lundvall, 1992) – rooted in the neo-Schumpeterian school of thought (Hanusch and Pyka, 2007) – provide a more realistic and comprehensive theoretical basis designed to capture the highly complex and socially embedded nature of innovation processes.

Interdisciplinary research on complex adaptive systems provides us with a powerful toolbox for analyzing and understanding system inherent dynamics compared to traditional, exclusively prize-quantity and cost-benefit oriented frameworks. This perspective allows us to identify systemic failures (Dodgson et al., 2011; Tödtling and Trippl, 2005) slowing down or hampering innovation. Within the systemic perspective, mostly unexplored innovation policy-related issues of a theoretical and an applied interest can be analyzed.

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:

- How can we systematically identify system failures in technological, sectoral or regional innovation systems? Additionally, how can innovation policy react?
- What are the insights from innovation systems research concerning the exploration of new technological opportunities?
- How can we use the innovation systems perspective to govern the major transformations towards sustainability?
- What role can consumers play in innovation systems and in innovation policy design?
- How do different relationships between established companies and start-up companies influence the dynamics of innovation systems?
- How are economic opportunities invigorated by entrepreneurship and which role therefore follows for innovation policy?
- Which role does the relationship between urban and periphery regions play in innovation systems and innovation policy?
- How do digital technologies influence the emergence, the development and the composition of innovation systems?
- How can innovation systems remain innovative when they face disruptive technological change?
- What role do innovation networks play in catching-up economies?
- How do interrelationships with actors at higher spatial levels (national, international) influence innovation systems?
- What can be learned from innovation systems research concerning innovation policy for peripheral areas?
- What role do borders play for the evolution of cross-border regional innovation systems?

Further topics related to these issues are highly welcome as well.

Organizational issues

The 4th Research Area [X] 'Networks' workshop is planned as a two-day event, organized in a workshop atmosphere with thematic paper sessions and guest speaker's presentations. Non-published work from senior as well as young scholars is highly welcome. Each participant will have to pay a participation fee of € 100 regular, € 50 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.andrassyuni.eu/veranstaltungen/4th-eaepe-research-area-x-networks-workshop.html

Submissions

We invite contributions within the thematic scope described which also address one or more of the research questions outlined above. Please submit extended abstracts (500-750 words, PDF or Word) until the 31st of August 2018 to: rax2018@andrassyuni.hu

Important deadlines

- Abstract submission deadline (max. 500-700 words): 31 August 2018
- Notification of acceptance: 30 September 2018
- Registration: 15 October 2018
- 4th EAEPE RA [X] Workshop in Budapest: 15-16 November 2018

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.:

- Michael Fritsch, FSU Jena, Germany
- Dominique Foray, EPFL Lausanne, Switzerland

In addition, we will organize a special issue in a well-recognized academic journal. A number of high quality papers presented at the workshop will be proposed for further consideration in this special issue. All paper submissions will undergo rigorous editorial screening and double-blind peer review by a minimum of two recognized scholars.

Scientific committee:

Abstract submissions will be evaluated by the following distinguished experts:

- Uwe Cantner, Friedrich Schiller University Jena, Germany
- Wolfram Elsner, University of Bremen, Germany
- Iciar Dominguez Lacasa, Technical University of Applied Sciences Wildau, Germany
- Balázs Lengyel, Hungarian Academy of Sciences, Hungary
- László Szerb, University of Pécs, Hungary
- Attila Varga, University of Pécs, Hungary
- Balázs Vedres, Central European University, Hungary
- Ben Vermeulen, University of Hohenheim, Germany
- Claudia Werker, Technical University Delft, The Netherlands

Workshop organization:

The 4th 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 Andrassy University Budapest. This year's workshop is organized by:

- Martina Eckardt, Andrassy University Budapest, Hungary
- Jutta Günther, University of Bremen, Germany
- Muhamed Kudic, University of Bremen, Germany
- Andreas Pyka, University of Hohenheim, Germany
- Jutta Sehic, Andrassy University Budapest, Hungary

Location:

Andrassy University Budapest
Pollack Mihály tér 3
1088 Budapest, Hungary

Further Information:

www.andrassyuni.eu/veranstaltungen/4th-eaepe-research-area-x-networks-workshop.html

References:

- Arthur, B. W. (1989). Competing technologies, increasing returns, and lock-in by historical events. *The Economic Journal*, 99 (394), 116-131.
- Boschma, R. (2005). Proximity and innovation: a critical assessment. *Regional Studies*, 39 (1), 61-74.
- David, P. A. (1985). Clio and the economics of QWERTY. *American Economic Review*, 75 (2), 332-337.
- Dodgson, M., Hughes, A., Foster, J. & Metcalfe, S. (2011). Systems thinking, market failure, and the development of innovation policy: The case of Australia, *Research Policy*, 40, 1145– 1156.
- Eckardt, M. (forthcoming). From Digital to Political Revolution – An Evolutionary Economic Approach to Information and Communication Technologies, in: Komáromi, L., Pállinger, Z.T. (eds.): *Political Innovations*, Pázmány Press, Budapest.
- Eckardt, M., Okruch, S. (2018). The Legal Innovation of the European Grouping of Territorial Cooperation and its Impact on Regulatory Competition, in: Masson, A., Orozco, D. (eds.), *Legal Innovation*, Paris, forthcoming
- Fritsch, M. (2000). Interregional differences in R&D activities - an empirical investigation. *European Planning Studies* 8, 409-427.
- Fritsch, M. (2003). Does R&D-cooperation behaviour differ between regions? *Industry and Innovation* 10, 25-39.
- Hagedoorn, J. (2002). Inter-firm R and D partnership: an overview of major trends and patterns since 1960. *Research Policy*, 31(4), 477-492.
- Hanusch, H. & Pyka, A. (2007). Principles of neo-Schumpeterian economics, *Cambridge Journal of Economics* 31(2), 275-289.
- Kirman, A. (1993). Ants, rationality, and recruitment. *The Quarterly Journal of Economics*, 108 (1), 137-156.
- Klepper, S. (1997). Industry life cycles. *Industrial and Corporate Change*, 6 (1), 145-181.
- Kudic, M. (2015). *Innovation Networks in the German Laser Industry - Evolutionary Change, Strategic Positioning, and Firm Innovativeness*. Heidelberg: Springer.
- Lundvall, B.-A. (1992). *National systems of innovation - towards a theory of innovation and interactive learning*. London: Pinter.
- Powell, W. W., Koput, K. W., and Smith-Doerr, L. (1996). Interorganizational collaboration and the locus of innovation - networks of learning in biotechnology. *Administrative Science Quarterly*, 41 (1), 116-145.
- Pyka, A. (1997). Informal networking. *Technovation*, 17 (4), 207-220.
- Simon, H. A. (1955). A behavioral model of rational choice. *Quarterly Journal of Economics*, 69 (1), 99-118.
- Tödtling, F., Trippel, M. (2005). One size fits all? Towards a differentiated regional innovation policy approach. *Research policy*, 34, 1203-1219.
- Tomasello, M., Napoletano, M., Garas, A., Schweitzer, F. (2017). The rise and fall of R&D networks, *Industrial and Corporate Change*, 26 (4), 617-646.
- Wuchty, Stefan, Benjamin F. Jones and Brian Uzzi (2007). The Increasing Dominance of Teams in Production of Knowledge. *Science*, 316, 1036-1039.