

# International Workshop on Reactive Concepts in ReactKnow Knowledge Representation 2014

Co-located with ECAI, Prague, Czech Republic, August 2014



## Important Dates

- ▶ Paper submission deadline: May 25, 2014
- ▶ Notification of acceptance: June 23, 2014
- ▶ Camera-ready papers: July 18, 2014

## Scope and Aim

In the field of Artificial Intelligence (AI), the subdomain of Knowledge Representation (KR) has the aim to represent, integrate, and exchange knowledge in order to provide reasoning about given and potentially incomplete information. While most traditional KR formalisms are concerned with knowledge bases that do not change over time or are only subject to occasional revisions, the advent of smart devices and recent advances in Internet technology—guided by the visions of a Semantic Web and the Internet of Things—has increased the interest in online applications that are able to directly react on a possibly infinite stream of external information such as sensor or network data. While current approaches for handling continuous stream data focus on rapid data processing, they lack complex reasoning capacities. Recent endeavours try to combine KR formalisms such as answer-set programming, Semantic Web ontologies, and multi-context systems with stream processing for providing knowledge-intense stream reasoning capabilities to various application areas such as urban computing, ambient assisted living, robotics, or dynamic scheduling. The goal of making sophisticated KR techniques accessible in the reactive setting poses many scientific challenges how to deal with emerging as well as expiring data in a seamless way. The International Workshop on Reactive Concepts in Knowledge Representation (ReactKnow) aims to provide an international forum for researchers in the AI and KR community to discuss and present advances in theories, formalisms, and applications to get closer to the vision of an Artificial Intelligence system which may react according to changing knowledge.

## Programme Committee

- ▶ Gerhard Brewka (Leipzig University)
- ▶ Michael Fink (TU Vienna)
- ▶ Robert Kowalski (Imperial College London)
- ▶ João Leite (Universidade Nova de Lisboa)
- ▶ Alessandra Mileo (DERI)
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## Organisers

- ▶ Stefan Ellmauthaler (Leipzig University)
- ▶ Jörg Pührer (Leipzig University)