



# SelPhys

## Description

Inspired by biological examples, self-awareness has become a hot research topic in a variety of disciplines and its applicability has been explored in various application domains. The topic owes its attractiveness to its promise to facilitate highly resilient, adaptive and outstandingly efficient behaviors. Thus, self-awareness is expected to promote dependability in all types of smart gadgets and artificial agents in the interconnected world of future.

The main purpose of this workshop is to build a community and to try to develop a shared and communal understanding of the main concepts underlying self-awareness with respect to CPS. Currently, self-awareness is studied in a range of different communities, where the underlying assumptions, definitions and goals differ significantly. This workshop will provide a forum for reflections and in-depth discussions of the pivotal concepts of this field which will serve as a basis for building an integrated scientific community and for developing future research projects.

**We seek previously published or unpublished contributions for oral and/or poster presentations on research relevant to self-awareness in cyber-physical systems on, but not limited to, the topics and application areas on the right side of the call.**

## Submission

The workshop submissions (one page extended abstract, PDF format only) has to be sent to workshop organizers (contact below). Organizers will sort the abstracts according to their relevance and expected impact to the workshop outcome. The number of presentation time-slots is limited. Authors of accepted submissions will be informed about decision and proposed presentation format before CPS WEEK early registration deadline.

Authors of accepted submissions will have opportunity to make their work public at the workshop website, but there will be no obligation to do so.

- Deadline for extended abstracts: 20 February 2016
- Decision of selection: 4 March 2016
- Event Date: 12 April 2016

**Submit to:** Axel Jantsch: [axel.jantsch@tuwien.ac.at](mailto:axel.jantsch@tuwien.ac.at)

## A CPS Week Workshop

Tuesday, April 12<sup>th</sup>, 2016  
Hofburg castle, Vienna, Austria

### TOPICS:

- ✓ Self-awareness in HW, Operating System, and applications
- ✓ Self-awareness facilitating autonomous, adaptive or resilient behavior
- ✓ Demonstration of self-awareness
- ✓ Architectures
- ✓ Design methods
- ✓ Systems with other Self-\* properties

### APPLICATION AREAS:

- ✓ Sensor Networks
- ✓ Internet of Things
- ✓ Automotive
- ✓ Robotics
- ✓ Health Monitoring
- ✓ Industrial Automation
- ✓ Autonomous Vehicles

**Organizers:** A. Jantsch, N. Dutt,  
N. TaheriNejad, K. Tammemäe

<http://www.ict.tuwien.ac.at/selphys/>  
<http://www.cpsweek.org/2016/events.html>