

# Workshop

## From Cybernetics to Systems Biology: The power of the automatic control paradigm



**Prof. Dr.-Ing. Frank Allgöwer**  
(University of Stuttgart, Germany)

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Feedback based automatic control is a key enabling technology for many technological advances like autonomous cars driving on automated highways, life in smart cities or the new production paradigm Industry 4.0. This series of talks will give a glimpse on the current state of this important field, will discuss some emerging trends and associated challenges, and will outline opportunities at the interdisciplinary intersection to other scientific disciplines. The series commences with a short general introduction to the concepts of feedback and their significance in nature and technology and a discussion of their relevance related to the digital revolution of our society (talk 1). This will be followed by two more technical talks on new developments in the field of automatic control theory (talks 2 & 3). Finally the potential impact of systems and control thinking on other scientific disciplines is discussed in the fourth talk with the example of systems biology.

Professor Frank Allgöwer is a professor for automatic control at the University of Stuttgart in Germany and an acknowledged international leader in the field.

**time:** 3<sup>rd</sup>– 6<sup>th</sup> May 2021, starts at 17:00 via Zoom

**participation:** free of charge, registration required until 23<sup>rd</sup> April 2021  
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