



LABORATORY OF COMPUTATIONAL  
NEUROSCIENCE (LCN)



ÉCOLE POLYTECHNIQUE  
FÉDÉRALE DE LAUSANNE

Thursday, February 12th, 2015  
13h30, Room AAC 132

**Alexander MAYE**

Department of Neurophysiology and Pathophysiology,  
University of Hamburg ·

## Models of action-based perception - achievements and challenges

Action-based approaches gain more and more importance in explaining human perception and cognition. They inspire new paradigms for studying human behavior and provide new interpretations of the underlying neural activity. The main concepts also find fertile ground in the field of artificial agents, where they open prospects for the development of control architectures which enable robots to cope with the real world.

Using the example of sensorimotor contingency theory, the talk gives an overview of recent achievements in these fields. They show that application of the theory holds promise, but also that the concept of action needs development.

Host: Prof. Wulfram Gerstner