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# Neural networks mapping actions to their sensory consequences

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### Abstract

A specific motor action can lead to different sensory consequences, and a particular sensory consequence can be achieved by different motor actions. This non-unique mapping between actions and sensory consequences is context dependent and requires learning in order to optimize behavior. During my talk, I will describe behavioral and neuroimaging studies in humans, in which we examined how actions modulate perception and how perception can lead to motor skill learning even in the absence of voluntary movement. Manipulating the link between actions and their sensory consequences by using virtual reality, we explore various training techniques to facilitate learning in healthy subjects and rehabilitation in patients with hemiparesis due to neurological origin.

## Date & Location:

**Tuesday, December 25, 2018, 11:00**
**Lecture room, Physics Building (ground floor)**