June 7, 2010

Multisensory Learning: Recalibration makes 'Sense'

Dr. Marc Ernst

Max Planck Institute for Biological Cybernetics - Tuebingen

ABSTRACT OF THE TALK

Many recent studies have shown that human multisensory perception and action is using the available sensory information in a close to optimal way. However, the environment we live in is constantly changing so that in order to behave optimal, humans have to adapt to these changes. In my talk I will review some of our recent studies on sensorimotor learning and will show how humans adapt to changes in the statistical regularities of the environment. The goal is to develop a model for sensorimotor learning which is based on Bayesian Decision Theory that can capture human adaptation behaviour from first principles.