

“Gießener Abendgespräche Kognition und Gehirn“

Mittwochs, 18.00 bis 20.00 Uhr, Raum F009

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„Have Libet-Experiments Been Misleading Us About Free Will?“

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When humans choose freely between different alternative actions, their choices are often predictable by prior brain signals. Such choice-predictive brain signals can be seen in the EEG, in fMRI and using intracranial recordings. The time across which prediction is possible can range from a few hundred milliseconds to several seconds. Choice-predictive signals are often taken to indicate that the outcome of a decision is already pre-determined at the time a person consciously believes to be making it. We investigated whether these choice-predictive brain signals are part of a ballistic causal chain that involuntarily leads to the predicted decision or whether a person can change or terminate the process once begun. We found that people can override choice-predictive brain signals until a very late stage of processing. This suggests that participants can control the outcome of a decision until a very late stage. This challenges the classical implications of Libet-experiments for the problem of free will.