

“Gießener Abendgespräche Kognition und Gehirn“

Mittwochs, 18.00 bis 20.00 Uhr, Raum F009

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“When Facts contradict: The Revision of Spatial Mental Models”

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Reasoners frequently revise existing beliefs when confronted with facts that contradict those beliefs. In cases where beliefs concern spatial relations, belief revision has fruitfully been treated as a problem of deciding which features of an initially constructed spatial mental model to maintain and which ones to modify. Usually, there is more than one way to revise a model and reasoners select from a number of revisions each of which is sufficient to re-establish consistency. Studies show that reasoners actually favor certain revisions above others, even when the revisions are equally acceptable from the standpoint of logic. In my talk, I present a series of experiments on spatial belief revision and follow up on the question of what determines revision preferences.