

The 38th International Seminar on Experiments and Surveys in Economics and Related Social Sciences

Date: 15:00-15:50 Tuesday, March 8, 2010

Speaker: Shinsuke Suzuki Laboratory for Integrated Theoretical Neuroscience  
RIKEN Brain Science Institute

Venue: W9 Building, 6th floor, Room #626, Ookayama campus, Tokyo Institute of Technology

Title: Does one simulate the other's value-based decision making by using the neural systems for his own?

Abstract:

In social contexts, another person's behavior often affects the outcome of one's value-based decision making which involves valuation and learning, i.e., reinforcement learning. So predicting the other's decision making is indispensable. In a broader context, it is often said in the field of social cognitive neuroscience that prediction about the other is made by 'simulating the other'; this simulation is often posited as using some systems like the so-called "mirror neuron system" that has been implicated in both one's own actions/sensations/emotions and one's perceptions of those by the other. For social value-based decision making, this could be translated to the question of whether one simulates the other's value-based decision making by using the same systems for one's own decision making or not. Here, using fMRI with model-based analysis, we will discuss (a) whether one actually simulates both valuation and learning of the other; and (b) whether this simulation uses the same neural mechanisms used for one's own decision making. Some priming studies relating to two-kanji compound words within the Japanese mental lexicon

Moderator: Noboru Hidano