

新聞稿 PRESS RELEASE



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## Neural Network Scholar to lecture "Computer and the Brain"

The brain and computer - these are two excellent information processing machines we now possess. Our brain has been developed through a long history of biological evolution as it works so well. The modern computer is a creation by the twentieth-century technology which has been developed so quickly beyond our anticipation and has been bringing us to the new civilization of information society.

A fundamental question is whether both the brain and modern computer use the same mechanisms to process information or they are based on completely different principles of information processing. If they are different, can we improve modern computers by studying the principles which computers are lacking?

We notice that our brain uses two different styles of thinking or reasoning: one is the logical thinking where information is represented by symbols or words, while the other is the intuitive thinking where information is represented by excitation patterns over a huge number of neurons.

The modern computer is a technological realization of the logical thinking style of the brain, which is supported by the more flexible intuitive thinking style. It is the neurocomputer which is expected to realize the latter style of computation. Neurocomputer is also important for understanding our brain.

Professor Shun-ichi Amari, Professor of Mathematical Engineering and Information Physics, University of Tokyo, Japan, will discuss the mechanisms of the brain and the brain-style computation based on models of neural networks in an upcoming Wei Lun lecture entitled "Computer and the Brain" at the Chinese University. The lecture will be held on Monday (September 18) at 4:30 pm in Auditorium, 5/F, Ho Sin Hang Engineering Building on campus. All are welcome to attend.

The Wei Lun Visiting Professorship\Fellowship Scheme at the Chinese University was established through the generous donation by the Wei Lun Foundation Ltd. Eminent scholars from around the world are regularly invited to the University to give public lectures and academic seminars.

Attachment: A biographical sketch of Professor Shun-ichi Amari