



COLLOQUIUM

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“Information Processing States and their Transitions Inferred from Brain Activity”

Abstract: If the brain is a machine that processes information, then its cognitive activity can be interpreted as a set of information processing states linking stimulus to response (i.e. as a mechanism or an algorithm). The cornerstone of this research agenda is the existence of a method to translate the measurable states of brain activity into the information processing states of a cognitive theory. Here, we contend that reverse correlation methods can provide this translation and we frame the transitions between information processing states in the context of automata theory. We illustrate, using examples from visual cognition, how this novel framework can be applied to understand the information processing algorithms of the brain in cognitive neuroscience.

Tuesday, August 9, 2011
12:00 p.m. – 1:00 p.m.
Walsh Conference Room
Barnwell College