

## **An Experimental Study on Monkeys for Neuron Functions in Hand Movement during Reaching and Grasp**

Shu-Chuan (Grace) Chen<sup>(1)\*</sup>, Jiping He<sup>(1)</sup>, and Lung-An Li<sup>(2)</sup>

<sup>(1)</sup> Arizona State University, Tempe, AZ 85287

<sup>(2)</sup> Academia Sinica, Taiwan  
scchen@math.la.asu.edu

### **Abstract**

To understand potential encoding mechanism of motorcortical neurons for control commands during reach-to-grasp movements, experiments to record neuronal activities have been conducted in many research laboratories. In order to study neuron mechanism, an experiment was conducted by the Neural Interface Design of the Biodesign Institute at Arizona State University. The experimental protocol was reviewed and approved by ASU Institutional Animal Care and Use Committee. In this talk, we will cover the details of the experiment, the most popular statistical methods applied to analyze the data in this kind of experiments, some challenging issues in the study and our proposed work.