

# Computational Neuroscience and Artificial Intelligence

Assistant Professor Siu Kang

## Illustration

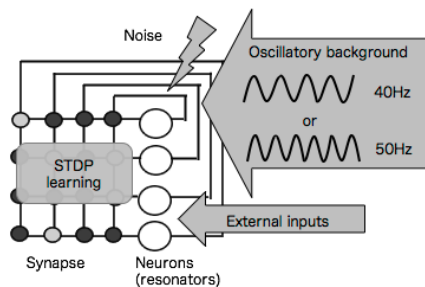


Fig1 Network dynamics of the sub-threshold resonator neurons

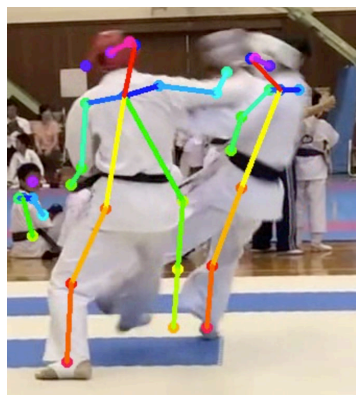


Fig2 Sensor-less pose estimation



Fig3 Human EEG recording

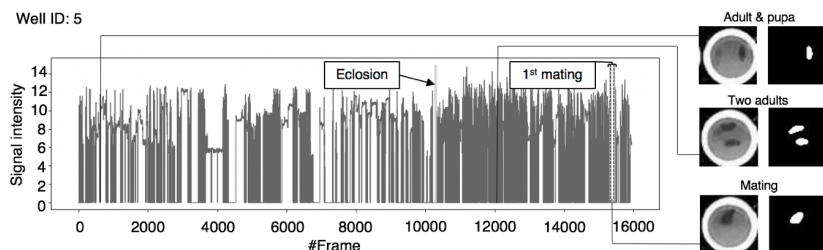


Fig4 Drosophila Individual Activity Monitoring and Detection system (DIAMonDs)

## Content :

The goal of our laboratory is to understand mysterious brain, especially dynamics of neural circuit through the theoretical approaches such as mathematics, numerical simulation and neural data analysis. In addition, we also develop the novel intelligent systems based on the brain-style computation toward automatic non-invasive assessments and classification of biological and medical data.

## Recent topics are:

- [1] Network dynamics of the sub-threshold resonator neurons
- [2] Sensor-less pose estimation algorithm
- [3] Human EEG analysis by deep learning
- [4] Automatic detection system for life-events in drosophila

## Appealing point :

We welcome any opportunities of collaboration.

Yamagata University Graduate School of Science and Engineering

Research Interest : Computational Neuroscience,  
Artificial Intelligence

E-mail : [siu@yz.yamagata-u.ac.jp](mailto:siu@yz.yamagata-u.ac.jp)

Tel : +81-238-26-3738

Fax : +81-238-26-3738

HP : -

