The NITech Frontier Research Institute for Information Science Kickoff Symposium

# Frontiers in Data-Driven Science and Technology:
# Recent Advances in Machine Learning and Applications

**Nov 5-6 2015, Nagoya Institute of Technology BLDG. 4 Hall (room 137, the 1st floor)**

http://www-als.ics.nitech.ac.jp/~workshop2015/

## Aim and Scope

The recent explosion of digital data in a wide variety of domains, including science, engineering and many business sectors, has declared the era of big data, which cannot be analyzed by classical statistics but by more modern, robust techniques in machine learning and data mining. In fact big data is not necessarily just for analytics to extract embedded information or knowledge but used more for the purpose of achieving better performance or even decision-making. This paradigm shift on data analysis leads to a breakthrough in academic research also, referred to as "data-driven science and technology". This workshop is the first attempt to contribute to this emerging paradigm by inviting scientists in machine learning and applications, to hear their latest achievements and explore solutions for future problems, a particular application focus being placed on signal data, biomedical and material sciences.

## Program

### Nov 5 (Thu)

| Time | Session |
|---|---|
| 10:00 - 10:15 | Opening |
| 10:15 - 10:55 | **Marco Cuturi** (Kyoto University, Japan) |
| 11:05 - 11:50 | **Shigeyuki Matsui** (Nagoya University, Japan) |
| 12:00 - 12:45 | **Samuel Kaski** (Aalto University, Finland) |
| 12:45 - 14:25 | Lunch break |
| 14:25 - 15:10 | **Keiichi Tokuda** (Nagoya Institute of Technology, Japan) |
| 15:10 - 15:55 | **Aapo Hyvarinen** (University of Helsinki, Finland) |
| 16:15 - 17:00 | **S V N Vishwanathan** (University of California, Santa Cruz, USA) |
| 17:00 - 17:45 | **Makoto Yamada** (Yahoo Labs, USA) |
| 18:00 | Banquet |

### Nov 6 (Fri)

| Time | Session |
|---|---|
| 9:00 - 9:45 | **Hisashi Kashima** (Kyoto University, Japan) |
| 9:55 - 10:40 | **Masashi Sugiyama** (University of Tokyo, Japan) |
| 10:50 - 11:35 | **Koji Tsuda** (University of Tokyo, Japan) |
| 11:35 - 13:15 | Lunch break |
| 13:15 - 14:00 | **Isao Tanaka** (Kyoto University, Japan) |
| 14:00 - 14:45 | **Kristof Schütt** (Technical University of Berlin, Germany) |
| 15:05 - 15:50 | **Michele Ceriotti** (EPFL, Switzerland) |
| 15:50 - 16:35 | **Matthias Rupp** (Fritz Haber Institute, Germany) |
| 16:35 - 16:45 | Closing |

## Host Organization

**The NITech Frontier Research Institute for Information Science**
Nagoya Institute of Technology

## Supporting Organization

Institute for Chemical Research, Kyoto University