

# Neuro-inspired Computation Course University of Tokyo, Japan March 21-24, 2019

The International Research Center for Neurointelligence (IRCN) was launched in 2017 to advance scientific progress at the boundary of neuroscience, computation, and artificial intelligence (AI) at the University of Tokyo. The First IRCN Course in Neuro-Inspired Computation is designed for international researchers from diverse fields and backgrounds at the graduate student and postdoctoral career stages to learn about the latest advances in computational modeling of the brain and its use in developing new AI strategies and applications. The course is part of the interdisciplinary research activities of the center and students will have an opportunity to contribute to the generation of new synergistic collaborations and the establishment of the research field of "Neurointelligence" in science and society. The course will be held from March 21-24, 2019 at the University of Tokyo, and tuition, international airfare, and accommodation will be covered for accepted applicants. We welcome applications from early career researchers, including diversity in gender, who wish to build their knowledge base and plan a career in the frontier area of neural computation, widely considered the foundation for an understanding of brain and machine intelligence.

## **Course Details:**

[Date]March 21 to 24, 2019[Venue]Sanjo-Kaikan Hall, The University of Tokyo,<br/>Hongo, Bunkyo-ku, Tokyo 113-0033, JAPAN



# **Course Topics and Lecturers:**

#### **Brain Architecture**

Partha Mitra (Cold Spring Harbor Laboratory, USA) Joel Levine / Jonathan Schneider (University of Toronto, Canada) Markus Diesmann (Jülich Research Center, Germany)

#### **Brain Dynamics**

Kazuyuki Aihara (IRCN, University of Tokyo, Japan) Stefano Panzeri (Italian Institutes of Technology, Italy) Michelle McCarthy / Nancy Kopell (Boston University, USA)

#### Deep Learning

Masashi Sugiyama (RIKEN and IRCN/University of Tokyo, Japan) Graham Taylor (University of Guelph and Vector Institute / Google Brain Montreal, Canada)

#### **Dynamical Systems**

Linda Smith (Indiana University, USA) Jun Tani (Okinawa Institute of Science and Technology, Japan) Yasuo Kuniyoshi (IRCN/University of Tokyo, Japan)

#### **Reinforcement Learning**

Kenji Doya (Okinawa Institute of Science and Technology, Japan) Daniel Brunner (CNRS, France)

#### **Brain Development / Disorders**

Taro Toyoizumi (RIKEN Center for Brain Science, Japan) Arvind Kumar (KTH Royal Institute of Technology, Sweden)



# **Application:**

# To apply:

Please create your account and complete your application form on this online application system, "T-cens SP"

Program Name: "Neuro-inspired Course at The University of Tokyo, Japan March 21-24, 2019"

If any questions, please see User Guide / T-cens FAQ.

Application Deadline: December 15, 2018

Required application materials (upload to website above):

- 1. CV including publications
- 2. Two letters of reference
- 3. A one page (single-spaced) statement covering:
  - a. Description of your current research
  - b. Reasons for participating in the course
  - c. What is the future of neural computation?
- 4. Tentative poster title (for required poster session)

## Contact:

For questions only: E-mail: <a href="mailto:course@ircn.jp">course@ircn.jp</a>