# Yu Terada

**Special Postdoctoral Researcher**
at **Lab for Neural Computation and Adaptation**,
**RIKEN Center for Brain Science**,
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## Current position

**Lab for Neural Computation and Adaptation,**
**RIKEN Center for Brain Science** Japan
Special Postdoctoral Researcher April 2018 - Present
Supervisor: Dr. Taro Toyoizumi

## Past position

- Main affiliation

  **Kabashima Lab,**
  **Department of Mathematical and Computing Science, School of Computing,**
  **Tokyo Institute of Technology** Japan
  Postdoctoral Researcher April 2017 - March 2018
  Supervisor: Prof. Yoshiyuki Kabashima

- Concurrent affiliation

  **Kabashima Lab,**
  **Department of Mathematical and Computing Science, School of Computing,**
  **Tokyo Institute of Technology** Japan
  Visiting Postdoctoral Researcher April 2018 - March 2019
  Supervisor: Prof. Yoshiyuki Kabashima

  **Roudi group,**
  **Kavli Institute for Systems Neuroscience, School of Medicine,**
  **Norwegian University of Science and Technology** Norway
  Visiting Postdoctoral Researcher October 2018 - February 2018, June 2019-July 2019
  Supervisor: Prof. Yasser Roudi

## Education

**Department of Applied Analysis and Complex Systems, Graduate School of Informatics,**
**Kyoto University** April 2012 - March 2017
Doctor and Master of Informatics
Supervisor: Prof. Toshio Aoyagi

**Department of physics, School of Science,**
**Tokyo Institute of Technology** April 2008 - March 2012
Bachelor of Science
Supervisor: Prof. Hidetoshi Nishimori

## Publications

1. **Yu Terada**, Tomoyuki Obuchi, Takuya Isomura, and Yoshiyuki Kabashima,
"Inferring Neuronal Couplings From Spiking Data Using a Systematic Procedure With a Statistical Criterion",
*Neural Computation* **32**, 2187-2211 (2020).

2. **Yu Terada** and Yoshiyuki Y. Yamaguchi,
"Linear response theory for coupled phase oscillators with general coupling functions",
*Journal of Physics A: Theoretical and Mathematical* **53**, 044001 (2020).

3. **Yu Terada**, Tomoyuki Obuchi, Takuya Isomura, and Yoshiyuki Kabashima,
"Objective and efficient inference for couplings in neuronal networks",
*Advances in Neural Information Processing Systems 31* (*NeurIPS 2018*).
This article was featured in *Machine Learning 2019* in *Journal of Statistical Mechanics: Theory and Experiment*.

4. **Yu Terada**, Keigo Ito, Toshio Aoyagi, and Yoshiyuki Y. Yamaguchi,
"Nonstandard transitions in the Kuramoto model: a role of asymmetry in natural frequency distributions",
*Journal of Statistical Mechanics: Theory and Experiment*, 013403 (2017).
This article was selected in *JSTAT Highlights*.

5. **Yu Terada** and Toshio Aoyagi, "Dynamics of two populations of phase oscillators with different frequency distributions", *Physical Review E* **94**, 012213 (2016).

## Grants

- **Japan Society for the Promotion of Science:**
**Grants-in-Aid for Scientific Research (KAKENHI)**
Title: "Theoretical research on spatiotemporal information processing in the brain"
Category: Grant-in-Aid for Early-Career Scientists
Period: April 2019 - March 2023
Amount: ¥4,290,000

- **TATEISI Science and Technology Foundation:**
**International Visiting**
Recipient: Professor Yasser Roudi at Norwegian University of Science and Technology
Period: August 2018 - January 2019
Amount: ¥500,000