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| Academic degree: | PhD in Physics, Kyoto University (2003) | |
| Professional Experience: | 2003 – 2006 Postdoc (JSPS, Humboldt Fellow), Department of Physical Chemistry, Fritz Haber Institute, Berlin 2006 –2008 Postdoc, Department of Mathematics, Hokkaido University, Sapporo 2008 –2012 Assistant Professor, Ochanomizu University, Tokyo 2012 – 2018 Associate Professor, Department of Information Sciences, Ochanomizu University, Tokyo 2018 – Current position | |
| Current Research: | Synchronization in coupled oscillators Modeling of dynamical systems in biology, chemistry, etc. | |

Tackling complex synchronization dynamics in coupled oscillators using a higher-order averaging method

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Synchronization of coupled oscillators emerges ubiquitously in various disciplines and is often responsible for the function of a system. Phase oscillator models, which are derived based on the projection onto the time-translation mode and time averaging, are simple but powerful platforms not only for understanding but also for controlling synchronization dynamics of real-world oscillators. Here, I will present recent achievements with an emphasis on the utility of a higher-order averaging method.