

# AOBA-YAMA COLLOQUIUM FOR MATHEMATICAL BIOLOGY 2019

<http://www.math.is.tohoku.ac.jp/~seno/seminars/abcMB/abcMB.html>

## Workshop

### *“Mathematical modeling and models of population dynamics in biological and social systems”*

WORKSHOP CHAIR: Hiromi SENO\*

SUPPORTED by

Research Center for Pure and Applied Mathematics, Graduate School of Information Sciences, Tohoku University

SPONSORED by

Graduate School of Information Sciences, Tohoku University

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This workshop shall be planned to make a cross-over exchange of ideas between different interdisciplinary fields, expecting also a certain instructive value for the students interested in or studying in such an interdisciplinary field.

## ■ Schedule

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**Oct. 7 (Mon.) 13:00–17:00**

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OPENING

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SESSION 1: Merlin Köhnke and Horst Malchow (Osnabrück University, Germany, Mathematics/Computer Science)

*“Temporal, spatial and spatio-temporal patterns in reaction-diffusion models of bioinvasions and their control”*

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SESSION 2: Minoru Osawa and Takashi Akamatsu (Tohoku University, Engineering; Information Sciences)

*“Equilibrium refinement for a model of non-monocentric internal structures of cities: A potential game approach”*

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SESSION 3: Michio Kondo (Tohoku University, Life Sciences)

*“Ecological community: linking structure to dynamics”*

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**Oct. 8 (Tue.) 12:20–13:45**

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LUNCHEON MEETING (with meals of no charge; pre-registration recommended)

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**Oct. 8 (Tue.) 14:00–17:00**

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SESSION 4: Takenori Takada (Hokkaido University)

*“Semelparity analysis using randomly generated matrix models”*

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SESSION 5: Naoya Fujiwara (Tohoku University, Information Sciences)

*“Tracking spreading events through human mobility data and networks”*

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SESSION 6: Emmanuel Dansu and Hiromi Seno (Tohoku University, Information Sciences)

*“Population dynamics driven by interactions on the internet”*

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CLOSING

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## ■ Venue

Graduate School of Information Sciences, Tohoku University

<https://www.is.tohoku.ac.jp/jp/introduction/access.html>

2F, Room 207

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## ■ Language for the workshop

English

## ■ Registration and fees

No registration and no fee, including the “LUNCHEON MEETING”.

About the “LUNCHEON MEETING” on the second day, it is strongly recommended for the participant to make a pre-registration to the workshop chair.