

# **Scientific Recognition: Evolution and Ecology**

# **Awards**

#### Åke Brännström

• Appointed as professor of interdisciplinary mathematics by Umeå University, Sweden

#### Chai Molina

Canadian Society of Applied and Industrial Mathematics Cecil Graham Doctoral Dissertation Award 2017

#### **Akira Sasaki**

• Japanese Society for Mathematical Biology President (2017-2018)

# **Invited lectures**

# **Gergely Boza**

- The evolution and stability of reactive investment strategies. International Conference: Modelling Biological Evolution 2017 (MBE17),
   University of Leicester, Leicester, UK, April 2017
- The evolution of conditional and context-dependent investments in mutualisms. Workshop: BIONOMICS The Biology and Economics of Mutualisms, Max-Planck-Institute for Evolutionary Biology, Plön, Germany, November 2017

#### **Ulf Dieckmann**

- Adaptive speciation. Gordon Research Conference: 2017 Speciation, Lucca (Barga), Italy, February 2017
- Understanding complex adaptive systems. Southern African Systems Analysis Centre (SASAC) Emerging Researchers Program, Johannesburg, South Africa, August 2017
- Social dilemmas. Alpbach-Laxenburg Group Meeting, Alpbach, Austria, August 2017
- Modeling eco-evolutionary dynamics: Bridging between theories and applications. International Society for Ecological Modelling (ISEM) Global Conference 2017: Adaptation and Evolution in Ecological Modelling: Linking Society and Academic Approaches in Disturbance and Disaster Management, Jeju City, Korea, September 2017
- Complex adaptive systems at the interface of ecology and evolution: An integrative overview. Kyung-Hee University, Seoul, Korea,
   September 2017
- Complex adaptive systems: From individuals to ecosystems. Seoul National University, Seoul, Korea, September 2017
- Social norms and the evolution of cooperation. Inha University, Incheon, Korea, September 2017
- Session: Toward a holistic bio-socio-economic Pan-Arctic fisheries assessment Chair. Arctic Circle Assembly, Reykjavik, Iceland, October 2017
- Reconciling societal objectives and stakeholder interests in integrated fisheries assessments. Arctic Circle Assembly, Reykjavik,
   Iceland, October 2017

#### **Bruno Ernande**

- Effects of global change on exploited fish stocks' life-history traits: Exploitation vs. environment and evolution vs. phenotypic
  plasticity (in French). 13th Colloquium of the French Association of Fisheries, French Research Institute for Exploitation of the Sea
  (IFREMER), Nantes, France, June 2017
- Effects of global change on exploited fish stocks' life-history traits: Exploitation vs. environment and evolution vs. phenotypic plasticity. International Flatfish Symposium 2017, Saint-Malo, France, November 2017

#### Mikko Heino

- Fisheries the greatest life-history experiment on earth. Darwin Day, Institute of Biodiversity, Animal Health & Comparative Medicine, University of Glasgow, Glasgow, UK, February 2017
- How does population regulation "work" in marine fish? Oceanographic Society of the Republic of China (OSROC) Ocean Sciences Conference 2017, National Sun Yat-sen University, Kaohsiung, Taiwan, May 2017
- Could integrated assessments reconcile stakeholder conflicts in managing fish resources? Ocean University of China, Qingdao,
   China, May 2017
- Fisheries-induced evolution: What it is, why it may matter, and what can we do? Fisheries Research Institute, Keelung, Taiwan, June 2017

- · Ecology and evolution of sustainable exploitation of fish stocks. Arctic Circle Assembly, Reykjavik, Iceland, October 2017
- Reconciling stakeholder conflicts in managing fish resources through integrating biological and socio-economic perspectives.

  University of Vigo, Vigo, Spain, December 2017

#### Mateusz Iskrzyński

• The impact of species loss on food webs. School of Life Sciences, University of KwaZulu-Natal, Durban, South Africa, September 2017

#### **Christina Kaiser**

- Can self-organization among microbial decomposer communities affect biogeochemical cycles in soil? University of Nottingham,
   Nottingham, UK, March 2017
- Linking microbial physiology and biogeochemical dynamics through individual-based modelling. Ecological Society of America (ESA)
   Annual Meeting, Portland, USA, August 2017
- Using NanoSIMS and stable isotope tracing to explore Carbon and Nitrogen exchange in the tripartite symbiosis of beech, ectomycorrhizal fungi and soil bacteria. Biodiversity Colloquium, Georg August University of Göttingen, Göttingen, Germany, November 2017
- Reciprocal trade of Carbon and Nitrogen at the root-fungus interface in ectomycorrhizal beech plants. Soil Science Colloquium, University of Hohenheim, Stuttgart, Germany, December 2017

#### Johan A.J. Metz

- Adaptive dynamics: Studying the change of community dynamical parameters through mutation and selection. Center for Evolutionary and Functional Ecology, French National Center for Scientific Research (CNRS) and Institute for Evolutionary Sciences of Montpellier (ISEM), University of Montpellier, Montpellier, France, March 2017
- Invasion fitness and fitness proxies. Center for Evolutionary and Functional Ecology, French National Center for Scientific Research (CNRS) and Institute for Evolutionary Sciences of Montpellier (ISEM), University of Montpellier, Montpellier, France, March 2017
- When do optimization arguments make evolutionary sense? Center for Evolutionary and Functional Ecology, French National Center for Scientific Research (CNRS) and Institute for Evolutionary Sciences of Montpellier (ISEM), University of Montpellier, Montpellier, France, March 2017
- The canonical equation of adaptive dynamics Part I: Derivation. Center for Evolutionary and Functional Ecology, French National
  Center for Scientific Research (CNRS) and Institute for Evolutionary Sciences of Montpellier (ISEM), University of Montpellier,
  Montpellier, France, March 2017
- The canonical equation of adaptive dynamics Part II: Effective population sizes. Center for Evolutionary and Functional Ecology,
  French National Center for Scientific Research (CNRS) and Institute for Evolutionary Sciences of Montpellier (ISEM), University of
  Montpellier, Montpellier, France, April 2017
- The canonical equation of adaptive dynamics Part III: A (toy) example. Center for Evolutionary and Functional Ecology, French
  National Center for Scientific Research (CNRS) and Institute for Evolutionary Sciences of Montpellier (ISEM), University of Montpellier,
  Montpellier, France, April 2017
- Bifurcation in adaptive dynamics: Some examples. Center for Evolutionary and Functional Ecology, French National Center for Scientific Research (CNRS) and Institute for Evolutionary Sciences of Montpellier (ISEM), University of Montpellier, Montpellier, France, May 2017
- Branching for multivariate traits: Attempts to get a fuller grip on adaptive speciation. Center for Evolutionary and Functional Ecology,
   French National Center for Scientific Research (CNRS) and Institute for Evolutionary Sciences of Montpellier (ISEM), University of Montpellier, Montpellier, France, May 2017
- Meso-evolutionary predictions derivable from the interplay between ecology and evolution. Center for Evolutionary and Functional Ecology, French National Center for Scientific Research (CNRS) and Institute for Evolutionary Sciences of Montpellier (ISEM), University of Montpellier, Montpellier, France, May 2017
- Evolutionary branching in the multivariate case. International Conference: Modelling Biological Evolution 2017 (MBE17), University
  of Leicester, Leicester, UK, April 2017

#### **Chai Molina**

• On evolutionary stability and instability in public goods games and beyond. Annual Meeting of the Canadian Society of Applied and Industrial Mathematics (CAIMS 2017), Dalhousie University, Halifax, Canada, July 2017

### **Kalle Parvinen**

 Evolution of dispersal in metapopulation models. The Graduate University for Advanced Studies (SOKENDAI), Hayama, Japan, January 2017

- Evolution of density-dependent cooperation in a structured metapopulation model. Game Theory Workshop, The University of Electro-Communications, Tokyo, Japan, March 2017
- The effect of spatial heterogeneity on evolution in spatial models. University of Helsinki, Helsinki, Finland, March 2017
- The effect of spatial heterogeneity on evolution in spatial models. International Conference: Modelling Biological Evolution 2017 (MBE17), University of Leicester, Leicester, UK, April 2017
- Environmental dimensionality. Biomathematics Day, University of Helsinki, Helsinki, Finland, May 2017
- · Environmental dimensionality. Mathematical Models in Ecology and Evolution, City, University of London, London, UK, July 2017

#### Akira Sasaki

- Current topics in evolutionary epidemiology. 2017 Summer Short Course on Mathematical Modeling in Epidemiology, National Institute of Statistical Sciences, Tokyo, Japan, August 2017
- R0 centrality of metapopulation epidemiological dynamics. Workshop on Mathematical Demography, Epidemiology, and Structured Population Dynamics, Department of Mathematics, Tokyo University, Tokyo, Japan, November 2017

#### **Karl Sigmund**

- The prisoner's dilemma: Partners and rivals. Honorary lecture, International Conference: Modelling Biological Evolution 2017 (MBE17), University of Leicester, Leicester, UK, April 2017
- The watchful eyes of the future. Opening speech, European Forum Alpbach 2017, Alpbach, Austria, August 2017

# Organized events

#### Åke Brännström

• Gordon Research Conference: 2017 Speciation, Lucca (Barga), Italy, February 2017 - Chair

#### **Ulf Dieckmann**

 Working Group on Fisheries-induced Evolution (WGEVO) of the International Council for the Exploration of the Sea (ICES) coregroup meeting, IIASA, Laxenburg, Austria, June 2017

#### **Bruno Ernande**

 Working Group on Fisheries-induced Evolution (WGEVO) of the International Council for the Exploration of the Sea (ICES) coregroup meeting, IIASA, Laxenburg, Austria, June 2017

#### Mikko Heino

 Working Group on Fisheries-induced Evolution (WGEVO) of the International Council for the Exploration of the Sea (ICES) coregroup meeting, IIASA, Laxenburg, Austria, June 2017

#### **Christina Kaiser**

- Session: Integrating soil systems ecology into biogeochemical models Convener. European Geosciences Union (EGU) General Assembly, Vienna, Austria, April 2017
- Session: Mycorrhizal microbiomes Convener. 9th International Conference on Mycorrhiza, Prague, Czech Republic, July August 2017

# **Chulwook Park**

• 19th International Conference on Perception and Action (ICPA 2017), Seoul, Korea, July 2017 – Organizing Committee member

#### **Akira Sasaki**

 2017 Summer Short Course on Mathematical Modeling in Epidemiology, National Institute of Statistical Sciences, Tokyo, Japan, August 2017

# Advisory boards

#### Åke Brännström

- Member, Committee for Graduate Studies, Faculty of Technical and Natural Sciences, Umeå University, Sweden
- · Chair, Internal Research Committee, Department of Mathematics and Mathematical Statistics, Umeå University

#### **Ulf Dieckmann**

• Chair-invited member, Working Group on Fisheries-induced Evolution (WGEVO) of the International Council for the Exploration of the Sea (ICES), Denmark

#### **Bruno Ernande**

- · Chair, Working Group on Fisheries-induced Evolution (WGEVO) of the International Council for the Exploration of the Sea (ICES), Denmark
- Member, Steering Committee of Scientific Challenge 1, French National Research Agency, France
- Co-coordinator of the International Research Network (GDR-I) "Responses of fisheries and aquaculture resources and their habitats to global change (RECHAGLO)" between French Association of Fisheries, French Research Institute for Exploitation of the Sea (IFREMER) and Department of Fisheries and Oceans, Canada
- · Member, Working Group "Mer", French National Research Alliance for the Environment (ALLENVI), France
- · Member, Scientific Committee, Center for Biodiversity Synthesis and Analysis (CESAB), Foundation for Research on Biodiversity, France

#### Mikko Heino

 Chair-invited member, Working Group on Fisheries-induced Evolution (WGEVO) of the International Council for the Exploration of the Sea (ICES), Denmark

### **Karl Sigmund**

• Council member, Game Theory Society

# **Editorships**

#### Åke Brännström

• Review editor, Frontiers in Ecology and Evolution

#### **Ulf Dieckmann**

· Associate editor, Journal of Evolutionary Medicine

#### Mikko Heino

- Editor, Ecology Letters
- Editor, ICES Journal of Marine Science

#### **Christina Kaiser**

- Subject editor, Soil Biology and Biochemistry
- Topic editor, Research Topic "Rhizosphere Functioning and Structural Development as Complex Interplay between Plants, Microorganisms and Soil Minerals", Frontiers

#### Johan A.J. Metz

• Editorial Board member, Acta Biotheoretica

#### Sergio Rinaldi

• Honorary Editorial Board member, International Journal of Bifurcation and Chaos

# Akira Sasaki

• Editorial Board member, Journal of Theoretical Biology

## **Karl Sigmund**

• Honorary Editorial Board member, International Journal of Bifurcation and Chaos