

# **Scientific Recognition: Evolution and Ecology Program**

# **Editorships**

# Ulf Dieckmann

• Journal of Evolutionary Medicine

### Mikko Heino

- Ecology Letters
- ICES Journal of Marine Science

#### Christina Kaiser

Soil Biology and Biochemistry

# Johan A.J. Metz

Acta Biotheoretica

## Sergio Rinaldi

International Journal of Bifurcation and Chaos

#### Akira Sasaki

Journal of Theoretical Biology

## Karl Sigmund

- Journal of Theoretical Biology
- International Journal of Bifurcation and Chaos
- Dynamic Games and Applications

# **Invited Lectures**

### Åke Brännström

• École de Médecine, Montpellier, France, "Speciation 2013 – Second European Conference on Speciation Research": Eco-evolutionary modeling of diversification and speciation

### Ulf Dieckmann

- Chemical Biological Centre (KBC), Umeå University, Sweden, Workshop "Species Interaction and Speciation": Adaptive speciation and evolutionary community assembly
- School of Economics, Faculty of Commerce, University of Cape Town, South Africa: Social norms and the evolution of cooperation
- Department of Biological Sciences, University of Cape Town, South Africa: Social norms and the evolution of cooperation
- Department of Botany and Zoology, Stellenbosch University, South Africa: Life histories, niche evolution, and adaptive speciation
- École de Médecine, Montpellier, France, "Speciation 2013 Second European Conference on Speciation Research": Robust adaptive speciation
- Mathematical Biosciences Institute, Ohio State University, Columbus, USA, Workshop "Rapid Evolution and Sustainability": The overlooked evolutionary dimension of modern fisheries
- Santa Fe Institute, USA, Workshop "Theory and Knowledge Systems for Sustainability Science": New approaches to sustainability science?
- Research Council of Norway, University of Bergen, Norway, IIASA—Norwegian Collaboration Workshop "Holistic approaches to global challenges": Sustainable management of marine fisheries
- Bolyai Institute, University of Szeged, Hungary, Workshop "Mathematics of Planet Earth 2013 Modelling in Life Sciences": Adaptive dynamics theory Understanding life-history evolution, niche construction, and speciation

## Mikko Heino

- University of Bergen, Norway, Bergen Summer Research School: Evolutionary effects of food production
- Glasgow, Scotland, Symposium "Deep Sea Fish Biology" of the Fisheries Society of The British Isles: Length structure of deeppelagic fishes sheds new light on their life histories
- Reykjavik, Iceland, Annual Science Conference of the International Council for the Exploration of the Sea: Do sustainable harvesting strategies need to account for fisheries-induced evolution?

- Reykjavik, Iceland, Annual Science Conference of the International Council for the Exploration of the Sea: Reconciling stakeholder conflicts through integrated assessments of sustainable harvesting strategies
- Mathematical Biosciences Institute, Ohio State University, Columbus, USA, Workshop "Rapid Evolution and Sustainability": Fisheries-induced evolution and sustainable fisheries

## Rupert Mazzucco

• Chemical Biological Centre, Umeå University, Sweden, Workshop "Species Interaction and Speciation": Speciation through pollinator-plant interactions

# Johan A.J. Metz

- Chemical Biological Centre, Umeå University, Sweden, Workshop "Species Interaction and Speciation": The interplay of infectivity that decreases with virulence and limited cross-immunity: (toy) models for respiratory disease divergence
- Mathématique et Informatique Fondamentale de Lyon, Université Claude Bernard & École Normale Supérieure, Lyon, France, Conference "Biological Invasions and Evolutionary Biology – Stochastic and Deterministic Models": The canonical equation of adaptive dynamics – A new role for the effective population sizes of population genetics
- Lorentz Centre, Leiden University, The Netherlands, Workshop in honor of the 65th birthday of Odo Diekmann "Mathematics from Biology and Biology from Mathematics: A Roundtrip in the Light of Suns and Stars": The interplay of infectivity that decreases with virulence and limited cross-immunity: (toy) models for respiratory disease divergence
- Department of Mathematics, University of Leicester, UK, Conference "Modelling Biological Evolution 2013 Recent Progress, Current Challenges and Future Directions": The interplay of infectivity that decreases with virulence and limited cross-immunity: (toy) models for respiratory disease divergence
- Department of Mathematics, Stockholm University, Sweden, 5th Swedish Meeting on Mathematical Biology: Mini-course on Adaptive Dynamics (I. Adaptive dynamics: Studying the change of community dynamical parameters through mutation and selection; II. The canonical equation of adaptive dynamics A new role for the effective population sizes of population genetics)
- Angers, France, Conference "Stochastic Models in Ecology, Evolution and Genetics (SMEEG) 2013": The interplay of infectivity that
  decreases with virulence and limited cross-immunity: (toy) models for respiratory disease evolution
- Institute for Mathematics and its Applications, University of Minnesota, Minneapolis, USA, Annual Program Year Workshop "Stochastic Modeling of Biological Processes": Adaptive dynamics – Some basic theory and an application (invited poster presentation)

# Kalle Parvinen

- Department of Mathematics and Statistics, University of Helsinki, Finland, Biomathematics Day 10: Metapopulation dynamics and the evolution of sperm parasitism
- Department of Mathematics, University of Leicester, UK, Conference "Modelling Biological Evolution 2013: Recent Progress, Current Challenges and Future Directions": Metapopulation dynamics and the evolution of sperm parasitism

### Akira Sasaki

- Shizuoka University, Hamamatsu, Japan, Symposium "Antarctic Freshwater Lake Ecosystem as Microcosmos Ecological Phenomena and Theory Linked at Ultimate Environment" at the 60th Annual Meeting of the Ecological Society of Japan: Adaptive light absorption for protection and photosynthesis in layered plant community
- Shizuoka University, Hamamatsu, Japan, Symposium on "Computational Virology" at the 23rd Annual Meeting of the Japanese Society for Mathematical Biology: Modeling viral replication processes and their evolution
- Tsukuba University, Ibaraki, Japan, Tsukuba Global Science Week 2013, Workshop "Systems Biology": Projecting evolutionary trajectory of influenza A virus Multidimensional scaling and individual-based antigenic drift model

## Karl Sigmund

- Dornbirn, Austria, 45th Conference of the International Simulation and Gaming Association: Mathematics and games
- École Normale Supérieure, Paris, France: Social learning of the social contract
- University of British Columbia, Vancouver, Canada: Social learning of the social contract
- Granada, Spain, Mathematics of Planet Earth Summer School "BIOMAT 2013 Evolution and Cooperation in Social Sciences and Biomedicine": Mini-course on the evolution of cooperation
- Innsbruck, Austria, 18th Congress of the Austrian Mathematical Society (ÖMG) and Annual Meeting of the German Mathematical Society (DMV): Gödel und der Wiener Kreis (public lecture)
- Kyoto University, Japan, Symposium "Prediction and Decision Making 2013": Social learning of the social contract
- Faculty of Mathematics, Physics and Informatics, Comenius University, Bratislava, Slovakia, Bratislava Economic Seminar 2013:
   Social learning of the social contract

## Sergio Rinaldi

• Polytechnic University of Milan and Piccolo Teatro, Milan, Italy, Celebration of the 150th Anniversary of the Polytechnic University of Milan: La ricerca improbabile: L'equazione dell'enigma dell'amore

- Department of Electronics, Information and Bioengineering, Polytechnic University of Milan, Italy, Course "Analysis of Complex Networks" organized by the Italian Society for Chaos and Complexity: Networks of dynamical systems and emergence of collective behaviors & Evolution of biological networks toward synchrony and chaos & Topological indicators of synchronization propensity
- Laboratoire Écologie et Évolution, École Normale Supérieure, Paris, France: Lecture series "Analysis of multi-species ecological and evolutionary dynamics"

# **Organized Events**

### Åke Brännström

- Workshop "Species Interaction and Speciation", Umeå University, Sweden, January 16–18, 2013
- Workshop "Advances in Numerical Analysis and Computational Sciences", Umeå University, Sweden, May 15–16, 2013

### Ulf Dieckmann

- Workshop "Species Interaction and Speciation", Umeå University, Sweden, January 16–18, 2013
- Annual Meeting of the Working Group on Fisheries-induced Evolution (WGEVO) of the International Council for the Exploration
  of the Sea, IIASA, Laxenburg, Austria, August 19–23, 2013

### Mikko Heino

Annual Meeting of the Working Group on Fisheries-induced Evolution (WGEVO) of the International Council for the Exploration
of the Sea, IIASA, Laxenburg, Austria, August 19–23, 2013

#### Ádám Kun

• Lake Balaton Meeting on Systems Chemistry, Badacsony, Hungary, May 8–12, 2013

### Johan A.J. Metz

- Lorentz Centre Workshop in honor of the 65th birthday of Odo Diekmann "Mathematics from Biology and Biology from Mathematics: A Roundtrip in the Light of Suns and Stars", Lorentz Center, Leiden University, The Netherlands, April 15–19, 2013
- International Conference on Stochastic Models in Ecology, Evolution and Genetics (SMEEG) 2013, Angers, France, December 9–13, 2013

### Kalle Parvinen

 Conference "Modelling Biological Evolution 2013: Recent Progress, Current Challenges and Future Directions", University of Leicester, UK, May 1–3, 2013

## Sergio Rinaldi

- Seminar "Sorprese e imprevedibilità nelle relazioni d'amore", Polytechnic University of Milan, Italy, December 18, 2013
- Seminar "Bluffing can be rewarding in love affairs: The lesson of Cyrano de Bergerac", IIASA, Laxenburg, Austria, June 24, 2013

## **Awards**

# Gergely Boza

• PhD received with Summa cum laude for PhD thesis titled "The role of polymorphism in the evolution and stability of cooperation"

# **Advisory Boards**

### Åke Brännström

Vice-Chair of the Research Networking Programme "Frontiers of Speciation Research" (FroSpects) of the European Science Foundation, ESF (2008–2013)

## Ulf Dieckmann

- Chair of the Research Networking Programme "Frontiers of Speciation Research" (FroSpects) of the European Science Foundation, ESF (2008–2013)
- Chair of the Expert Group "Fisheries-Induced Evolution" (WGEVO) of the International Council for the Exploration of the Sea, ICES (2010–2015)

### Mikko Heino

• Chair of the Expert Group "Fisheries-Induced Evolution" (WGEVO) of the International Council for the Exploration of the Sea, ICES (2010–2015)

# Ádám Kun

• Member of the Management Committee of the COST CM1304 Action on "Emergence and Evolution of Complex Chemical Systems" (2013–2017)

# Karl Sigmund

• Council Member, Game Theory Society (2013–)