

Publications & Conferences

17. **Olaf Witkowski** and Takashi Ikegami. Under review. *Signal-based swarming and neutral selection*. Submitted to PLoS One.
16. Aleksandr Drozd, **Olaf Witkowski**, Satoshi Matsuoka and Takashi Ikegami. October 2015. *Signal-Driven Swarming: A Parallel Implementation of Evolved Autonomous Agents to Perform A Foraging Task*. Proceedings of the First International Symposium on Swarm Behavior and Bio-Inspired Robotics.
15. **Olaf Witkowski** and Takashi Ikegami. October 2015. *Swarm Ethics: Evolution of Cooperation for Multi-Agent Foraging Model*. Proceedings of the First International Symposium on Swarm Behavior and Bio-Inspired Robotics.
14. Nathanaël Aubert-Kato and **Olaf Witkowski**. July 2015. *The Hunger Games: Embodied agents evolving foraging strategies on the frugal-greedy spectrum*. Proceedings of the Thirteenth European Conference on Artificial Life, 13.
13. **Olaf Witkowski**. March 2015. *Evolution of Coordination and Communication in Groups of Embodied Agents*. Published as PhD thesis, Library for Engineering and Information Science & Technology, University of Tokyo. Japan.
12. **Olaf Witkowski**, Geoff Nitschke and Takashi Ikegami. January 2015. *Signal drives genetic diversity: an agent-based approach to speciation*. Proceedings of the Twentieth International Symposium on Artificial Life and Robotics, 20.
11. **Olaf Witkowski** and Nathanaël Aubert-Kato. July 2014. *Pseudo-static cooperators: Moving isn't always about going somewhere*. Proceedings of the Fourteenth International Conference on the Simulation and Synthesis of Living Systems, 14, 392–397.
10. **Olaf Witkowski** and Takashi Ikegami. July 2014. *Asynchronous evolution: Emergence of signal-based swarming*. Proceedings of the Fourteenth International Conference on the Simulation and Synthesis of Living Systems, 14, 302–309.
9. **Olaf Witkowski** and Geoff Nitschke. September 2013. *The Transmission of Migratory Behaviors*. Proceedings of the Twelfth European Conference on Artificial Life, 12, 1218–1220.
8. **Olaf Witkowski** and Nathanaël Aubert. July 2013. *Size Does Matter: The Impact of Size on Hoarding Behaviour*. Proceedings of the Thirteenth International Conference on The Synthesis and Simulation of Living Systems, 13, 542–543.
7. **Olaf Witkowski**, Geoff Nitschke and Takashi Ikegami. July 2012. *When is happy hour: An agent's concept of time*. Proceedings of the Thirteenth International Conference on The Synthesis and Simulation of Living Systems, 13, 544–545.
6. **Olaf Witkowski**, Geoff Nitschke and Takashi Ikegami. March 2012. *Time To Migrate: The Effect of Lifespan on Imitation and Culturally Learned Migration*. Seventh International Workshop on Natural Computing.
5. Luke McCrohon and **Olaf Witkowski**. August 2011. *Devil in the details: Analysis of a coevolutionary model of language evolution via relaxation of selection*. Advances in Artificial Life, ECAL 2011. Proceedings of the Eleventh European Conference on the Synthesis and Simulation of Living Systems, 522–529.
4. **Olaf Witkowski**. September 2011. *A Two-Speed Language Evolution: Exploring the Linguistic Carrying Capacity*. Proceedings of Ways to Protolanguage 2 (Protolang 2011).
3. **Olaf Witkowski**. July 2011. *Can Cultural Adaptation Lead to Evolutionary Suicide?* Proceedings of the Twenty-Third Annual Human Behavior & Evolution Society Conference (HBES 2011).
2. **Olaf Witkowski**. August 2010. *A Two-Speed Language Evolution*. Proceedings of the Fourth Annual International Free Linguistics Conference.
1. **Olaf Witkowski**. September 2007. *Decrypting Khipu Cords Used by Incas as a Means of Communication: an Example of Ethno-Cryptography*. Published as MSc thesis, Library of Exact Sciences, Catholic University of Louvain. Belgium.

Invited Talks & Lectures

- 2015 *Signal-Driven Swarm Intelligence and Evolutionary Robotics*. Molecular Robotics Symposium. Tokyo. October 28.
- 2015 *Evolution of Swarm Intelligence: Towards Higher Levels of Cognition*. University of Cape Town. Cape Town. September 7-11.
- 2015 *The Value of Signals in the Evolution of Collective Behavior*. Workshop on Artificial Life and Embodied Systems. Institute of Intelligent Systems and Robotics, Paris. June 25.
- 2015 *Evolution of Coordination to Cooperation to Language: An Artificial Life Approach*. Sackler Centre for Consciousness Science. University of Sussex, Brighton. July 25.
- 2015 *Open-Ended Modeling: How to Make Artificial Life Do Better At Studying Real Life?* Workshop on Artificial Life and Open-Ended Evolution at ELSI. Tokyo, Japan. May 21.
- 2013 *Time To Migrate: The Effect of Lifespan on Imitation and Culturally Learned Migration*. Seventh International Workshop on Natural Computing. Tokyo, Japan. March 21.
- 2012 *Evolution of Artificial Communication in Embodied Agents: The Impact of Temporal Concept on Communicative Behavior*. Ikegami Lab Summer Workshop. Sapporo, Japan. August 2-3.
- 2012 *Size Does Matter: The Impact of Size on Hoarding Behaviour*. Bio UT International Life Sciences Symposium. Tokyo, Japan. May 2012.
- 2011 *A Two-Speed Language Evolution: Exploring the Linguistic Carrying Capacity*. Ikegami Lab Summer Workshop. Yamanaka, Japan. July 23.

Awards

- 2010: IST International Research Program Fellowship, Université du Québec à Montréal (Canada).
- 2009: MEXT Monbukagakusho Scholarship, University of Tokyo (Japan).
- 2008: Erasmus Grant for Student Mobility for Internships, University of Sheffield (UK).
- 2007: Graduated with Honors from UCL, obtaining the protected title of Civil Engineer (Belgium).
- 2007: Erasmus European Fellowship, Polytechnic University of Valencia (Spain).

Boards & Societies

- 2015: Review Editorial Board of the International Symposium on Swarm Behavior and Bio-Inspired Robotics (<http://www.ohk.hiroshima-u.ac.jp/SWARM2015>)
- 2015: Contributor of the Strategy for Origins of Life Research (SOLR) Roadmap Workshop (<http://eon.elsi.jp/event/the-strategy-for-origins-of-life-research/>)
- 2015: Member of the Initiative for a Synthesis in Studies of Awareness (ISSA), a new international community towards integrative approaches to the study of awareness (<http://issa.elsi.jp/>)
- 2013 – 2015: Review Editorial Board of Evolutionary Robotics for the Journal Frontiers in Robotics and AI (<http://www.frontiersin.org/>)
- 2011 – 2015: International Society for Artificial Life (<http://alife.org/>)
- 2010 – 2015: Organizer of Tokyo Evolutionary Linguistics Group (<http://www.evolutionarylinguistics.com/>)
- 2008: Sheffield NLP Research Group (<http://nlp.shef.ac.uk>)
- 2008: Information Systems Research Group (ISYS)
- 2007: MIT Khipu Research Group (<http://projects.csail.mit.edu/khipu/>)