

CURRICULUM VITAE

THOMAS GÜNTHER STÜTZLE



IRIDIA
Université libre de Bruxelles (ULB)
Brussels, Belgium

HIGHLIGHTS

- Position** Thomas Stützle is a tenured senior research associate (*maître de recherches*) employed at the fund for scientific research (F.R.S.-FNRS) of Belgium's french community.
- Awards**
- He was named *Fellow of the Institute of Electrical and Electronics Engineers (IEEE)* (effective since January 1, 2016)
 - *Impact award*: His article "A racing algorithm for configuring meta-heuristics" (see publication IC.19 in his publication list) has received the GECCO 2012 Impact Award, which was given for the most cited paper of the GECCO 2002 conference.
 - He received best paper awards for his articles at the GECCO 2011 (IC.84), GECCO 2010 (IC.73), LION 4 (IC.70), ANTS 2006 (IC.47), and EvoCOP 2002 (IC.17) conferences.
- Publications and Citations**
- He has published more than 200 peer-reviewed scientific articles in the area of computational intelligence and operations research.
 - The number of citations to his publications is well above the average. His publications have received more than 34 000 citations in the google scholar database and his h-index is 67 (January 2017).
 - He co-authored the books "Ant Colony Optimization" (published by MIT Press and translated into Chinese) and "Stochastic Local Search—Foundations and Applications" (published by Morgan Kaufmann Publishers), which both are the main references in their respective fields.
- Editorial activities**
- He is an associate editor of the journals Applied Mathematics and Computation, Computational Intelligence, Evolutionary Computation, International Transactions on Operational Research and Swarm Intelligence as well as on the editorial board of seven other journals.
 - He has edited or co-edited 22 books or proceedings of international conferences or workshops.
 - He has served as member of the programme committee of more than 85 international conferences or workshops over the last five years.
- Research funding** Since 2005, he was awarded more than 2.5 million Euro of research funding in the form of European or national research projects.

POST-SECONDARY EDUCATION

Habilitation Computer Science	Darmstadt University of Technology, Germany, 2004. <i>Referees:</i> Prof. Wolfgang Bibel, Prof. Hartmut Schmeck <i>Title:</i> “Part 1: Stochastic Local Search — Foundations and Applications, Part 2: Ant Colony Optimization.”.
Dr. rer. nat. Computer Science	Darmstadt University of Technology, Germany, 1998. <i>Supervisor:</i> Prof. Wolfgang Bibel <i>Title:</i> “Local Search Algorithms for Combinatorial Problems — Analysis, Im- provements, and New Applications”.
M.S. Business Engineering	Universität Karlsruhe (TH), Karlsruhe, Germany, 1994. <i>Supervisor:</i> Prof. Georg Bol <i>Diploma thesis:</i> “A comparison of Neural Networks to Quality Control Charts without Memory”.

EMPLOYMENT RECORD

10/2013 - today	Senior Research Associate of the Belgian F.R.S-FNRS working at IRIDIA, CoDE, Faculty of Applied Sciences, Université Libre de Bruxelles, Belgium.
10/2005 - 9/2013	Research Associate of the Belgian F.R.S.-FNRS at IRIDIA, CoDE, Faculty of Applied Sciences, Université Libre de Bruxelles, Belgium.
10/2002 - 9/2005	Assistant Professor (Wissenschaftlicher Assistent, C1) at the Intellectics Group, Department of Computer Science, Darmstadt University of Technology, Germany.
4/2002 - 9/2002	Invited, temporary Professor position (C3) at the Department of Computer Science, Darmstadt University of Technology, Germany.
7/2000 - 3/2002	Assistant Professor (Wissenschaftlicher Assistent, C1) at the Intellectics Group, Department of Computer Science, Darmstadt University of Technology, Germany.
3/2000 - 7/2000	Research Assistant (Wissenschaftlicher Mitarbeiter, BAT2) at the Intellectics Group, Department of Computer Science, Darmstadt University of Technology, Germany.
12/1998 - 2/2000	Researcher at the <i>Institut de Recherches Interdisciplinaires et de Développements en Intelligence Artificielle</i> (IRIDIA), Université Libre de Bruxelles, Belgium.
7/1998 - 11/1998	Research Assistant (Wissenschaftlicher Mitarbeiter, BAT2) at the Intellectics Group, Department of Computer Science, Darmstadt University of Technology, Germany.
7/1995 - 6/1998	Member of the “Graduiertenkolleg ISIA” (Intelligent Systems for Information and Automation Technologies) pursuing PhD studies at the Intellectics Group, Department of Computer Science, Darmstadt University of Technology, Germany.

- 11/1994 - 6/1995** Post-graduate fellow at the Department of Statistics and Operations Research, Universidad Complutense de Madrid, Spain.
- 10/1989 - 11/1994** Graduate Studies in Business Engineering at the University of Karlsruhe. During that time, from 10/1992- 6/1993, studies at the Faculty of Mathematics and the Faculty of Economic Sciences, “Universidad Complutense de Madrid”, Spain.

FELLOWSHIPS

- 12/1998 – 2/2000** Marie Curie Fellowship awarded by the European Commission for studies at IRIDIA, Université Libre de Bruxelles, Brussels, Belgium.
- 7/1995 – 6/1998** Fellowship awarded by the Deutsche Forschungsgemeinschaft (German Research Foundation) via “Graduiertenkolleg ISIA” at TU Darmstadt.
- 10/1994 – 6/1995** Fellowship awarded by the Spanish Ministry of Foreign Affairs for post-graduate studies at the Department of Statistics and Operations Research, Faculty of Mathematics, “Universidad Complutense de Madrid” (Spain).
- 10/1992 – 6/1993** Fellowship awarded by the German Academic Exchange Office (DAAD) for studies at the “Universidad Complutense de Madrid” (Spain) at the Mathematics Department and the Economic Sciences Department.

HONORS AND AWARDS

- IEEE Fellow** I was named Fellow of the Institute of Electrical and Electronics Engineers (IEEE) for *contributions to the design and engineering of heuristic optimization algorithms*.
- GECCO, 2012** The paper *A racing algorithm for configuring metaheuristics*, co-authored with Mauro Birattari, Luis Paquete, and Klaus Varrentrapp, has received the GECCO 2012 Impact Award, which was given for the most cited paper of the GECCO 2002 conference (publication **IC.19**).
- GECCO, 2011** The paper *An Incremental Ant Colony Algorithm with Local Search for Continuous Optimization*, co-authored with Tianjun Liao, Marco Montes de Oca, Dogan Aidin, and Marco Dorigo, has received the best paper award of the Ant Colony Optimization and Swarm Intelligence track at the GECCO 2011 conference, Dublin, Ireland, 2011 (publication **IC.84**).
- GECCO, 2010** The paper *The Impact of Design Choices of Multiobjective Ant Colony Optimization Algorithms on Performance: An Experimental Study on the Biobjective TSP*, co-authored with Manuel López-Ibáñez, has received the best paper award of the Ant Colony Optimization and Swarm Intelligence track at the GECCO 2010 conference, Portland, Oregon, 2010 (publication **IC.73**).
- LION 4, 2010** The paper *Adaptive “Anytime” Two-Phase Local Search*, co-authored with Jérémie Dubois-Lacoste and Manuel López-Ibáñez, has received the best paper award of the LION 4 conference, Venice, Italy, 2010 (publication **IC.70**).

ANTS 2006 The paper *PLANTS: Application of Ant Colony Optimization to Structure-Based Drug Design*, co-authored with Oliver Korb and Thomas Exner, has received the best paper award of the ANTS'2006 workshop (publication **IC.47**).

EvoCOP 2002 The paper *An Experimental Investigation of Iterated Local Search for Coloring Graphs*, co-authored with Luis Paquete, has received the best paper award of the EvoCOP'02 workshop (publication **IC.17**).

LANGUAGES

German	Mother tongue
English	Fluent written and spoken
Spanish	Fluent written and spoken
French	Intermediate level

CONTACT DATA

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PERSONAL DATA

Date and place of birth	December 13, 1968, in Donauwörth, Germany
Nationality	German
Family	Married, two sons

RESEARCH PROJECTS

- **COMEX:** This is an “Interuniversity Attraction Poles (IAP)” research project on *Combinatorial Optimization: Metaheuristics and Exact Methods*, which runs from October 1, 2012 to September 30, 2017. I am a local coordinator of this project, which involves six universities in Belgium.
Contribution **500.000 Euro**
- **COLOMBO:** This is an “EU FP7 ICT” STREP project on *Cooperative Self-Organizing System for low Carbon Mobility at low Penetration Rates*, which runs from November 2012 to October 2015. I am a local coordinator of this project.
Contribution **317.000 Euro**
- **META-X:** This is an “Action de Recherche Concertée (ARC)” research project on *META-X: Metaheuristics for Complex Optimization Problems*, which runs from October 2008 to September 2013. I am a principal researcher of this project.
Contribution **650.000 Euro**
- **FRFC project on Hybrid Search Methods for Complex Problems:** This is a joint “FRFC” research project with the *BeCool* research group at Université catholique de Louvain, which runs from January 2010 to December 2013. Associated to this project is a two year post-doctoral fellowship for a post-doctoral researcher in mobility.
Contribution **109.000 Euro**
- **Algorithms and models for the genomic median problem:** This project is financed through a FRIA fellowship (October 2007 to max. September 2011) awarded to Renaud Lenne for pursuing his doctoral studies. I am the main supervisor of Renaud Lenne and collaborating in this project with Christine Solnon (Université Lyon 1, France) and Eric Tannier (INRIA Rhône-Alpes, LBBE, France).
FRIA Contribution **per year ca. 30.000 Euro**
- **Automatic Tuning of Stochastic Local Search Algorithms:** This project is financed through a FNRS Aspirant fellowship (October 2008 to September 2009) awarded to Zhi (Eric) Yuan for pursuing his doctoral studies.
F.R.S.-FNRS Contribution **per year ca. 30.000 Euro**
- **COMP2SYS: COMPUTational Intelligence methods for COMPLEX SYSTEMS:** After I joined IRIDIA in 2005, I collaborated in the COMP2SYS Early Stage Training project (from April 2004 to March 2008), which was funded by the EU Marie Curie Activities programme. In this project, I supervised three doctoral students: Prasanna Balaprakash, Max Manfrin, and Zhi Yuan.
- **Metaheuristics Network:** The Metaheuristics Network is an EU Research and Training Network, which started in September 2000 and ended in August 2004. I was local co-ordinator of the Metaheuristics Network at the Intellectics Group, Darmstadt University of Technology. In this position I have guided the doctoral research of four PhD students (Matthijs den Besten, Marco Chiarandini, Luis Paquete, and Tommaso Schiavinotto) and advised two visiting PhD students (Mauro Birrattari–1 year visitor–and Marco Pranzo–6 month visitor) who were all financed from the Metaheuristics Network.
EU contribution **240.000 Euro**

- **Acções Integradas Luso-Alemãs/DAAD-GRICES, Portugal:** Joint DAAD–GRICES project from 2003 to 2004 on the unification of the run-time and solution-quality views of optimiser performance. The Portuguese partner was Prof. Carlos Fonseca, University of Algarve, Faro.
DAAD contribution **6.000 Euro**
- **Host of Marie Curie Fellow:** I was the research director of Dr. Irina Dumitrescu, a Marie Curie Fellow at the Intellectics Group. Dr. Dumitrescu was working on the project “Local Search and Integer Programming–Hybrid Methods,” from February 2002 to January 2004.
EU contribution **140.200 Euro**
- **CARPOOL:** The CARPOOL project from 2001 to 2002 was a joint DAAD-Vigoni research project studying metaheuristics applied to the long term car pooling problem. The Italian partner was Prof. Vittorio Maniezzo, University of Bologna, Sede di Cesena.
DAAD contribution **8.000 Euro**

PROFESSIONAL ACTIVITIES

EDITORIAL WORK

Associate editor

- Applied Mathematics and Computation
- Computational Intelligence
- Evolutionary Computation
- International Transactions in Operational Research
- Swarm Intelligence

Member of editorial board

- European Journal of Industrial Engineering
- Frontiers Robotics and AI
- International Journal of Applied Metaheuristic Computing
- Journal of Artificial Intelligence Research
- Operations Research Perspectives
- PeerJ – Computer Science
- Soft Computing

Journal special issues

- I have co-edited nine journal special issues. A full list of the edited special issues is given in items **JSI.9** to **JSI.1** in my publication list.

Books and proceedings

- I have co-edited a total of 22 books, proceedings of international conferences, and proceedings of workshops. A full list of this editorial work is given in item **EBP.22** to **EBP.1** in my publication list.

Program Committee Membership I have been in the program committee of 91 workshops or conferences in the last five years.

Steering Committee Membership I'm in the steering committee of the Metaheuristics and the Learning and Intelligent Optimization conference series as well as of the EURO Working group on "Data Science meets Optimization".

TUTORIALS

- Thomas Stützle. Tutorial on *Automatic (Offline) Configuration of Algorithms* at the 2016 IEEE World Congress on Computational Intelligence, Vancouver, Canada, July 2016.

- Thomas Stützle and Manuel López-Ibáñez. Tutorial on *Automatic (Offline) Configuration of Algorithms* at the Genetic and Evolutionary Computation Conference, GECCO 2016, Madrid, Spain, July 2016 (with Manuel López-Ibáñez).
- Thomas Stützle. Tutorial on *Automatic (Offline) Configuration of Algorithms* at the EURO 2015 Conference, Glasgow, UK, July 2015.
- Thomas Stützle and Manuel López-Ibáñez. Tutorial on *Automatic (Offline) Configuration of Algorithms* at the Genetic and Evolutionary Computation Conference, GECCO 2015, Madrid, Spain, July 2015 (with Manuel López-Ibáñez).
- Thomas Stützle and Manuel López-Ibáñez. Tutorial on *Automatic Algorithm Configuration: From Parameter Tuning to Automatic Design* at the Learning and Intelligent Optimization conference, LION 9, Lille, France, January 2015 (with Manuel López-Ibáñez).
- Thomas Stützle and Manuel López-Ibáñez. Tutorial on *Automatic (Offline) Configuration of Algorithms* at the Genetic and Evolutionary Computation Conference, GECCO 2014, Vancouver, Canada, July 2014 (with Manuel López-Ibáñez).
- Thomas Stützle. Tutorial on *Stochastic local search algorithms: an algorithm engineering perspective* at the 2nd Brazilian Conference on Intelligent Systems (BRACIS-13), Fortaleza, Brazil, October 2013.
- Thomas Stützle and Manuel López-Ibáñez. Tutorial on *Automatic (Offline) Configuration of Algorithms* at the Genetic and Evolutionary Computation Conference, GECCO 2013, Amsterdam, The Netherlands, July 2013 (with Manuel López-Ibáñez).
- Tutorial on *Metaheuristics for Combinatorial Optimization* at the Evolutionary Algorithms summer school in Quiberon, France, June 2013.
- Tutorial on *Stochastic Local Search Algorithms: Design and Configuration* at the Evolutionary Algorithms summer school in Calais, France, June 2011.
- EMO 2009 Tutorial on *Ant Colony Optimization*, Nantes, France, April 2009.
- META 2008 Tutorial on *Towards Engineering Stochastic Local Search Algorithms*, Hammamet, Tunisia, October 2008.
- LION 2007 II Tutorial on *Engineering Stochastic Local Search Algorithms*, Trento, Italy, December 2007.
- TAAME–Theory And Applications of MEtaheuristics–tutorial day, Department of Engineering, KaHo Sint-Lieven. Tutorial on *Ant Colony Optimizaion*, Gent, Belgium, November 2007.
- CP-AI-OR 2007 master class lecture on *Ant Colony Optimization Applications to Scheduling Problems*, Brussels, Belgium, May 2007.
- ANTS 2006 Tutorial on *Introduction to Stochastic Local Search*, Brussels, Belgium, September 2006.
- MIC'05 Tutorial on *Iterated Local Search*, Vienna, Austria, July 2005.
- ORP3'05 Tutorial on *Stochastic Local Search Methods*, Valencia, Spain, 2005.
- AAAI'04 Tutorial on *Stochastic Local Search*, San Jose, CA, USA, 2004. (together with Holger Hoos)
- IJCAI'03 Tutorial on *Stochastic Search Algorithms*, Acapulco, Mexico, August 2003. (together with Holger Hoos)
- International Summer School on Metaheuristics, Tutorial on *Simulated Annealing, Dynamic Local Search, GRASP, and Iterated Greedy*, Tenerife, Spain, March 2003.

- International Summer School on Metaheuristics, Tutorial on *Iterated Local Search and Variable Neighbourhood Search*, Tenerife, Spain, March 2003.
- International Summer School on Metaheuristics, Tutorial on *Advanced Local Search*, Tenerife, Spain, March 2003. (together with Irina Dumitrescu)
- IJCAI'01 Tutorial on *Stochastic Search Algorithms*, Seattle, USA, August 2001. (together with Holger Hoos)
- ECAI'00 Tutorial on *Stochastic Search Algorithms*, Berlin, Germany, August 2000. (together with Holger Hoos)

PROGRAM COMMITTEES

- 2018**
 - BIOMA 2018, Eighth International Conference on Bioinspired Optimization Methods and their Applications, Paris, France.
 - ICAART 2018, 10th International Conference on Agents and Artificial Intelligence, Funchal, Portugal.
 - ICORES 2018, 7th International Conference on Operations Research and Enterprise Systems, Funchal, Portugal.
- 2017**
 - EA 2017, International Conference on Artificial Evolution, Paris, France.
 - EvoCOP 2017, 17th European Conference on Evolutionary Computation in Combinatorial Optimization, Amsterdam, The Netherlands.
 - GCAI 2017, 3rd Global Conference on Artificial Intelligence, Miami, USA.
 - GECCO 2017, Genetic and Evolutionary Computation Conference, Berlin, Germany.
 - ICAART 2017, 9th International Conference on Agents and Artificial Intelligence, Porto, Portugal.
 - ICORES 2017, 6th International Conference on Operations Research and Enterprise Systems, Porto, Portugal.
 - ICTAI 2017, 29th International Conference on Tools with Artificial Intelligence, Boston, USA.
 - KI 2017, 40th German Conference on Artificial Intelligence, Dortmund, Germany.
 - LION 11, Learning and Intelligent OptimizatioN 2017, Nizhny Novgorod, Russia
 - MAEB 2016, XII Congreso Español de Metaheurísticas, Algoritmos Evolutivos y Bioinspirados, Barcelona, Spain.
 - MIC 2017, Metaheuristics International Conference, Barcelona, Spain.
 - MOD 2017, 3rd International Workshop on Machine learning, Optimization and big Data, Volterra, Italy.
 - MODeM 2017, Multi-Objective Decision Making at AAMAS 2017, São Paulo, Brazil.
 - TPNC 2017, 6th International Conference on the Theory and Practice of Natural Computing, Prague, Czech Republic.
 - VNS 2016, 5th International Conference on Variable Neighborhood Search, Málaga, Ouro Preto, Brazil.

- 2016**
- AECIA 2016, Third Afro-European Conference for Industrial Advancement, Marrakesh, Morocco, 2016.
 - BNAIC 2016, The 28th Benelux Conference on Artificial Intelligence, Amsterdam, The Netherlands.
 - EvoCOP 2016, 16th European Conference on Evolutionary Computation in Combinatorial Optimization, Porto, Portugal.
 - GCAI 2016, 2nd Global Conference on Artificial Intelligence, Berlin, Germany.
 - GECCO 2016, Genetic and Evolutionary Computation Conference, Denver, Colorado, USA.
 - HM 2016, 10th International Workshop on Hybrid Metaheuristics, Plymouth, United Kingdom.
 - ICAART 2016, 8th International Conference on Agents and Artificial Intelligence, Rome, Italy.
 - ICORES 2016, 5th International Conference on Operations Research and Enterprise Systems, Rome, Italy.
 - ICTAI 2016, 28th International Conference on Tools with Artificial Intelligence.
 - KI 2016, 39th German Conference on Artificial Intelligence, Klagenfurt, Austria.
 - LION 10, Learning and Intelligent Optimization 2016, Ischia Island, Italy.
 - MAEB 2016, XI Congreso Español de Metaheurísticas, Algoritmos Evolutivos y Bioinspirados, Salamanca, Spain.
 - META'2016, 6th International Conference on Metaheuristics and Nature Inspired Computing, Marrakech, Morocco.
 - MOD 2016, Second International Workshop on Machine Learning, Optimization and Big Data, Volterra, Italy.
 - ORBEL 30, 30th Annual Conference of the Belgian Operations Research Society, Louvain-la-Neuve, Belgium.
 - PPSN2016, 14th International Conference on Parallel Problem Solving from Nature, Edinburgh, UK.
 - VNS 2016, 4th International Conference on Variable Neighborhood Search, Málaga, Spain.
 - WCCI 2016, 2016 IEEE World Congress on Computational Intelligence—IEEE Congress on Evolutionary Computation (CEC), Vancouver, Canada.
 - WCO 2016, the 8th Workshop on Computational Optimization, Gdansk, Poland.
- 2015**
- AAAI 2015, Twenty-Ninth AAAI Conference on Artificial Intelligence, Austin, Texas, USA.
 - AECIA 2015, Second Afro-European Conference for Industrial Advancement, Villejuif, France, 2015.
 - BNAIC 2015, The 27th Benelux Conference on Artificial Intelligence, Hasselt, Belgium.
 - CEC 2015, 2015 IEEE Congress on Evolutionary Computation, Sendai, Japan.
 - EA 2015, International Conference on Artificial Evolution, Lyon, France.
 - EMO 2015, 8th International Conference on Evolutionary Multi-Criterion Optimization, Coimbra, Portugal.
 - EvoCOP 2015, 15th European Conference on Evolutionary Computation in Combinatorial Optimization, Copenhagen, Denmark.
 - GCAI 2015, Global Conference on Artificial Intelligence, Tbilisi, Georgia.
 - GECCO 2015, Genetic and Evolutionary Computation Conference, Madrid, Spain.
 - ICAART 2015, 7th International Conference on Agents and Artificial Intelligence, Lisbon, Portugal.

- ICORES 2015, 4th International Conference on Operations Research and Enterprise Systems, Lisbon, Portugal.
- ICTAI 2015, 27th International Conference on Tools with Artificial Intelligence, Vietri sul Mare, Italy.
- IES 2015, 16th Asia Pacific Symposium of Intelligent and Evolutionary Systems, Bangkok, Thailand.
- IJCAI 2015, 24th International Joint Conference on Artificial Intelligence, Senior Programme Committee member; Buenos Aires, Argentina.
- KI 2015, 38th German Conference on Artificial Intelligence, Dresden, Germany.
- LION 8, Learning and Intelligent Optimization 2015, Lille, France.
- MAEB 2015, X Congreso Español de Metaheurísticas, Algoritmos Evolutivos y Bioinspirados, Mérida, Spain.
- MIC 2015, Metaheuristics International Conference, Agadir, Morocco.
- ORBEL 29, 29th Annual Conference of the Belgian Operations Research Society, Antwerp, Belgium.
- RCRA 2015, 22nd RCRA International Workshop on "Experimental Evaluation of Algorithms for solving problems with combinatorial explosion, Ferrara, Italy.
- SSCI 2015, 2015 IEEE Swarm Intelligence Symposium, Cape Town, South Africa.
- WCO 2015, the 7th Workshop on Computational Optimization, Lodz, Poland.

2014

- AAI 2014, Twenty-Eighth AAI Conference on Artificial Intelligence, Québec City, Canada.
- AECIA 2014, First Afro-European Conference for Industrial Advancement, Addis Ababa, Ethiopia, 2014.
- BNAIC 2014, The 26th Benelux Conference on Artificial Intelligence, Nijmegen, the Netherlands.
- CEC 2014, 2014 IEEE Congress on Evolutionary Computation, Beijing, China.
- EvoCOP 2014, 14th European Conference on Evolutionary Computation in Combinatorial Optimization, Granada, Spain.
- ECAI 2014, 21st European Conference on Artificial Intelligence, Senior Programme Committee member, Prague, Czech Republic.
- HM 2014, 9th International Workshop on Hybrid Metaheuristics, Hamburg, Germany.
- ICAART 2014, 6th International Conference on Agents and Artificial Intelligence, Angers, France.
- ICORES 2014, 3rd International Conference on Operations Research and Enterprise Systems, Angers, France.
- ICTAI 2014, 26th International Conference on Tools with Artificial Intelligence, Limassol, Cyprus.
- IES 2014, 18th Asia Pacific Symposium of Intelligent and Evolutionary Systems, Singapore.
- KI 2014, 37th German Conference on Artificial Intelligence, Stuttgart, Germany.
- LION 8, Learning and Intelligent Optimization 2014, Gainesville, Florida, USA.
- META'2014, International Conference on Metaheuristics and Nature Inspired Computing, Marrakech, Morocco.
- ORBEL 28, 28th Annual Conference of the Belgian Operations Research Society, Mons, Belgium.
- PDCN 2014, IASTED International Conference on Parallel and Distributed Computing and Networks, February 2014, Innsbruck, Austria.

- PPSN 2014, 13th International Conference on Parallel Problem Solving From Nature, Ljubljana, Slovenia.
 - TPNC 2014, 3rd International Conference on the Theory and Practice of Natural Computing, Granada, Spain.
 - WCO 2014, the 7th Workshop on Computational Optimization, Wroclaw, Poland.
- 2013**
- BNAIC 2012, 25th Benelux Conference on Artificial Intelligence, Delft, The Netherlands.
 - CEC 2013, 2013 IEEE Congress on Evolutionary Computation, Cancun, Mexico.
 - EMO 2013, 7th International Conference on Evolutionary Multi-Criterion Optimization, Sheffield, UK.
 - EPIA 2013, 16th Portuguese Conference on Artificial Intelligence, Angra do Heroísmo, Açores, Portugal.
 - EvoCOP 2013, 13th European Conference on Evolutionary Computation in Combinatorial Optimization, Vienna, Spain.
 - FOGA 2013, Foundations of Genetic Algorithms (FOGA), Adelaide, Australia.
 - HM 2013, 8th International Workshop on Hybrid Metaheuristics, Ischia, Italy.
 - ICAART 2013, 5th International Conference on Agents and Artificial Intelligence, Barcelona, Spain.
 - ICANNGA 2013, 11th International Conference on Adaptive and Natural Computing Algorithms. Lausanne, Switzerland.
 - ICORES 2013, 2nd International Conference on Operations Research and Enterprise Systems, Barcelona, Spain.
 - ICTAI 2013, the 25th IEEE International Conference on Tools with Artificial Intelligence, Washington DC, USA.
 - IJCAI 2013, 23rd International Joint Conference on Artificial Intelligence, Senior Programme Committee member; Beijing, China.
 - LION 7, Learning and Intelligent Optimization 2013, Catania, Italy.
 - MAEB 2013, IX Congreso Español de Metaheurísticas, Algoritmos Evolutivos y Bioinspirados, Madrid, Spain.
 - MIC 2013, Metaheuristics International Conference, Singapore.
 - ORBEL 27, 27th Annual Conference of the Belgian Operations Research Society, Kortrijk, Belgium.
 - RCRA 2013, 20th Workshop on Experimental Evaluation of Algorithms for Solving Problems with Combinatorial Explosion
 - SIS 2013, 2013 IEEE Swarm Intelligence Symposium, Singapore.
 - TPNC 2013, 2nd International Conference on the Theory and Practice of Natural Computing, Cáceres, Spain.
- 2012**
- BNAIC 2012, 24th Benelux Conference on Artificial Intelligence, Maastricht, The Netherlands.
 - ECAI 2012, 20th European Conference on Artificial Intelligence, Montpellier, France.
 - EvoCOP 2012, 12th European Conference on Evolutionary Computation in Combinatorial Optimization, Málaga, Spain.
 - ICAART 2012, 4th International Conference on Agents and Artificial Intelligence, Vilamoura, Portugal.
 - ICORES 2012, 1st International Conference on Operations Research and Enterprise Systems, Vilamoura, Portugal.

- ICTAI 2012, the 24th IEEE International Conference on Tools with Artificial Intelligence, Athens, Greece.
 - LION 6, Learning and Intelligent OptimizatioN 2012, Paris, France.
 - MAEB-2012, VIII Congreso Español de Metaheurísticas y Algoritmos Evolutivos y Bioinspirados, Albacete, España.
 - Matheuristics 2012, Fourth International Workshop on Model-Based Metaheuristics, Angra dos Reis, Brazil.
 - META'2012, International Conference on Metaheuristics and Nature Inspired Computing, Port El Kantaoui, Tunisia.
 - ORBEL 26, 26th Annual Conference of the Belgian Operations Research Society, Brussels, Belgium.
 - PPSN 2012, 12th International Conference on Parallel Problem Solving From Nature, Taormina, Italy.
 - VNS 2012, 2nd International Conference on Variable Neighborhood Search, Herceg Novi, Montenegro.
 - WCO 2012, the 5th Workshop on Computational Optimization, Wroclaw, Poland.
 - WSC17, 17th Online World Conference on Soft Computing in Industrial Applications, on-line.
- 2011**
- BNAIC 2011, 23rd Benelux Conference on Artificial Intelligence, Ghent, Belgium.
 - CAEPIA'11, 14th Conference of the Spanish Association for Artificial Intelligence, Tenerife, La Laguna, Spain.
 - GECCO 2011, Genetic and Evolutionary Computation Conference, Dublin, Ireland.
 - EA 2011, 10th Biannual International Conference on Artificial Evolution, Angers, France.
 - EPIA 2011, 15th Portuguese Conference on Artificial Intelligence, Lisbon, Portugal.
 - EvoCOP 2011, Eleventh European Conference on Evolutionary Computation in Combinatorial Optimization, Turin, Italy.
 - FedCSIS, 6th International Symposium on Advances in Artificial Intelligence and Applications, Szczecin, Poland.
 - IEEE CEC 2011, 2011 IEEE Congress on Evolutionary Computation, New Orleans, USA.
 - ICTAI 2011, 23rd IEEE International Conference on Tools with Artificial Intelligence, Boca Raton, FL, USA, November 2011.
 - LION 5, Learning and Intelligent OptimizatioN, Rome, Italy, January 2011.
 - LSCS 2011, 8th Workshop on Local Search Techniques in Constraint Satisfaction, Perugia, Italy.
 - PDCN 2011, IASTED International Conference on Parallel and Distributed Computing and Networks, February 2011, Marina del Rey, USA.
 - PDCS 2011, International Conference on Parallel and Distributed Computing and Systems, Dallas, USA.
 - SIS 2011, 2011 IEEE Swarm Intelligence Symposium, Paris, France, April 2011.
- 2010**
- SEA 2010, 9th International Symposium on Experimental Algorithms, Ischia Island, Italy, 2010.
 - LION 4, Learning and Intelligent OptimizatioN, Venice, Italy, January 2010.
 - PPSN 2010, 11th International Conference on Parallel Problem Solving From Nature, Krakow, Poland.

- GECCO 2010, Genetic and Evolutionary Computation Conference, Portland, Oregon, USA.
 - CEC 2010, IEEE Congress on Evolutionary Computation, Barcelona, Spain.
 - EvoCOP 2010, Tenth European Conference on Evolutionary Computation in Combinatorial Optimization, Istanbul, Turkey.
 - HM 2010, 7th International Workshop on Hybrid Metaheuristics, Vienna, Austria.
 - LSCS 2010, 7th Workshop on Local Search Techniques in Constraint Satisfaction, St Andrews, Scotland.
 - ICTAI 2010, 22nd IEEE International Conference on Tools with Artificial Intelligence (ICTAI-2010), Arras, France.
 - IEA/AIE 2010, International Conference on Industrial, Engineering & Other Applications of Applied Intelligent Systems, June 2010, Córdoba, Spain.
 - ICAART 2010, 2nd International Conference on Agents and Artificial Intelligence, January 2010, Valencia, Spain
 - ISAIM, 11th International Symposium on Artificial Intelligence and Mathematics, January 2010, Ft. Lauderdale, Florida
 - IASTED International Conference on Parallel and Distributed Computing and Networks (PDCN 2010), Innsbruck, Austria.
 - IPMU-2010, 13th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems, Dortmund, Germany.
 - NatComp'2010, Workshop on Nature Inspired Computing, May 2010, Hammamet, Tunisia.
 - Workshop of Computational Optimization (WCO' 10, held in conjunction with IMCSIT 2010), Karpacz, Poland.
- 2009**
- MIC 2009, Metaheuristics International Conference, Hamburg, Germany.
 - EvoCOP 2009, Ninth European Conference on Evolutionary Computation in Combinatorial Optimization, Tübingen, Germany.
 - HM 2009, 6th International Workshop on Hybrid Metaheuristics, Udine, Italy.
 - GECCO 2009, Genetic and Evolutionary Computation Conference, Montreal, Canada.
 - Learning from Failures in Evolutionary Computation Workshop at GECCO 2009, Montreal, Canada.
 - ICAPS 2009, International Conference on Automated Planning and Scheduling, Thessaloniki, Greece.
 - SIS 2009, IEEE Swarm Intelligence Symposium, Nashville, Tennessee, USA.
 - EMO 2009, Evolutionary Multiobjective Conference, Nantes, France.
 - CEC 2009, IEEE Congress on Evolutionary Computation, Trondheim, Norway.
 - LSCS 2009, Sixth International Workshop on Local Search Techniques in Constraint Satisfaction, Lisbon, Portugal.
 - Hybrid Metaheuristics and Their Applications, Workshop held at the Ninth International Conference on Intelligent Systems Design and Applications, Pisa, Italy, 2009.
 - Taller sobre Metaheurísticas Inteligentes en la Planificación Logística, Workshop of CAEPIA-TTIA 2009. Sevilla, Spain.
 - JCC 2009, First Workshop on Emergent Computing, Chile.
- 2008**
- HM 2008, 5th International Workshop on Hybrid Metaheuristics, Málaga, Spain.
 - WEA 2008, 7th International Workshop on Experimental Algorithms, Provincetown (Cape Cod), MA, USA.

- WCCI 2008, 2008 IEEE World Congress on Computational Intelligence—IEEE Congress on Evolutionary Computation (CEC), Hong Kong, China.
 - ISAIM 2008, Tenth International Symposium on Artificial Intelligence and Mathematics, Fort Lauderdale, Florida, USA.
 - EvoCOP 2008, Eight European Conference on Evolutionary Computation in Combinatorial Optimization, Napels, Italy.
 - PPSN 2008, 10th International Conference on Parallel Problem Solving From Nature, Dortmund, Germany.
 - GWAL-8, 8th German Workshop on Artificial Life, Leipzig, Germany.
 - LSCS 2008, Fifth International Workshop on Local Search Techniques in Constraint Satisfaction, Sydney, Australia.
 - WAI 2008, Sixth Workshop de Inteligencia Artificial (WAI), Punta Arenas, Chile
 - META 2008, International Conference on Metaheuristics and Nature Inspired Computing, Hammamet, Tunisia.
 - Matheuristics 2008, Bertinoro, Italy.
- 2007**
- MIC 2007, Metaheuristics International Conference, Montral, Canada.
 - WEA 2007, 6th International Workshop on Experimental Algorithms, Rome, Italy.
 - HM 2007, 4th International Workshop on Hybrid Metaheuristics, Dortmund, Germany.
 - EA 2007, 8th International Conference on Artificial Evolution 2007, Tours, France.
 - SIS 2007, 2007 IEEE Swarm Intelligence Symposium, Honolulu, USA.
 - LION 2, Learning and Intelligent OptimizatioN, Andalo (Trento), Italy; February 2007.
 - LION 2007bis, Learning and Intelligent OptimizatioN, Andalo (Trento), Italy; December 2007.
 - EvoCOP 2007, Seventh European Conference on Evolutionary Computation in Combinatorial Optimization, Valencia, Spain.
 - EMO 2007, Evolutionary Multi-Criterion Optimization, Matsushima, Japan.
 - MICAI 2007, 6th Mexican International Conference on Artificial Intelligence, Aguascalientes, Mexico, 2007.
 - AGRO 2007, Special session of the 2007 IEEE Congress on Evolutionary Computation, Singapore.
 - LSCS 2007, Fourth International Workshop on Local Search Techniques in Constraint Satisfaction, Providence, RI, September 2007.
 - Chilean Workshop on AI, Iquique, Chile; November 2007.
- 2006**
- HM 2006 - Third International Workshop on Hybrid Metaheuristics, Gran Canaria, Spain.
 - GECCO 2006, Genetic and Evolutionary Computation Conference 2006, Seattle, USA.
 - EvoCOP 2006, Sixth European Conference on Evolutionary Computation in Combinatorial Optimization, Budapest, Hungary, 2006.
 - MICAI 2006, 5th Mexican International Conference on Artificial Intelligence, Apizaco, Mexico, 2006.
 - Parallel Problem Solving from Nature (PPSN'2006), Reykjavik, Island, 2006.
 - Workshop on Empirical Methods for the Analysis of Algorithms (EMAA'06), Reykjavik, Iceland, 2006.
 - LSCS 2006, Third International Workshop on Local Search Techniques in Constraint Satisfaction, Nantes, France, 2006.

- EvoOpt 2006, a special track of The 19th International FLAIRS Conference, Melbourne Beach, USA, 2006.
 - First International Symposium on Nature-Inspired Systems for Parallel, Asynchronous and Decentralised Environments, Bristol, England, 2006.
- 2005**
- Metaheuristics International Conference 2005 (MIC'05), Wien, Österreich.
 - EURO Operational Research Peripatetic Post-graduate Programme 2005 (ORP3'05), Valencia, Spanien.
 - Genetic and Evolutionary Computation Conference 2005 (GECCO'05), Washington D.C., USA.
 - SIS 2005, 2005 IEEE Swarm Intelligence Symposium, Pasadena, USA.
 - 3rd International Conference on Evolutionary Multi-Criterion Optimization 2005 (EMO'05), Guanajuato, Mexico.
 - 7th International Conference on Artificial Evolution 2005 (EA'05), Lille, France.
 - Second International Workshop on Hybrid Metaheuristics, Barcelona, Spain, 2005.
 - Fifth European Conference on Evolutionary Computation in Combinatorial Optimization, Lausanne, Swiss, 2005.
- 2004**
- Parallel Problem Solving from Nature (PPSN'2004), Birmingham, UK, 2004.
 - Genetic and Evolutionary Computation Conference, 2004 (GECCO'04), Seattle, USA.
 - 2nd Starting AI Researchers Symposium, STAIRS-2004 (collocated with ECAI-2004), Valencia, Spain, 2004
 - Mexican International Conference on Artificial Intelligence 2004 (MICAI'04), Mexico City, Mexico.
 - Fourth European Conference on Evolutionary Computation in Combinatorial Optimization, Coimbra, Portugal, 2004.
 - ECAI'04 Workshop on Hybrid Metaheuristics, Valencia, Spanien.
 - GECCO'04 Workshop on Hybrid Evolutionary Algorithms, Seattle, USA, 2004.
 - Tercer Congreso Español de Metaheurísticas, Algoritmos Evolutivos y Bioinspirados, Córdoba, Spain, 2004.
- 2003**
- GECCO'03 Workshop on Application of Hybrid Evolutionary Algorithms to NP-complete Problems, Chicago, Illinois, USA, 2003.
 - Seventh World Multi-Conference on Systemics, Cybernetics and Informatics (SCI'03), area on Operations Research, Tools & Applications, Orlando, Florida, USA, 2003.
 - Third European Workshop on Evolutionary Computation in Combinatorial Optimization, Essex, UK, 2003.
 - Segundo Congreso Español de Metaheurísticas, Algoritmos Evolutivos y Bioinspirados, Gijón, Spain, 2003.
- 2002**
- 12th International Conference in Computing CIC-2002, Mexico City, Mexico, 2002.
 - ANTS'2002 - From Ant Colonies to Artificial Ants: Third International Workshop on Ant Algorithms, Brussels, Belgium, 2002.
 - Genetic and Evolutionary Computation Conference, 2002 (GECCO'02).
 - The First International Joint Conference on Autonomous Agents & Multi-Agent Systems (AAMAS 2002), Bologna, Italy.
 - Mexican International Conference on Artificial Intelligence 2002 (MICAI'02), Yucatan, Mexico.

- Second European Workshop on Evolutionary Computation in Combinatorial Optimization, Kinsale, Ireland, 2002.
- 2001**
- Genetic and Evolutionary Computation Conference, 2001 (GECCO'01).
 - First European Workshop on Evolutionary Computation in Combinatorial Optimization, Como, Italy, 2001.
 - SCCC'2001 Workshop on Advances & Trends in Artificial Intelligence for Problem Solving: ATAI, Punta Arenas, Chile.
 - ECML'2001 Workshop on Machine Learning as Experimental Philosophy of Science, Freiburg, Germany.
- 2000**
- SCCC'2000 Workshop on Advances & Trends in Artificial Intelligence for Problem Solving, Chile.
 - ANTS'2000 - From Ant Colonies to Artificial Ants: Second International Workshop on Ant Algorithms, Brussels, Belgium, 2000.
- 1998**
- ANTS'1998 - From Ant Colonies to Artificial Ants: First International Workshop on Ant Colony Optimization, Brussels, Belgium, 1998.

REVIEWING ACTIVITIES

International Journals:

4OR, ACM Transactions on Autonomous and Adaptive Systems, AI Communciations, Annals of Operations Research, Artificial Intelligence, Central European Journal of Economics and Operations Research, Computación y Sistemas, Computational Intelligence, Computational Optimization and Applications, Computers & Industrial Engineering, Computers & Operations Research, Control and Cybernetics, Discrete Applied Mathematics, Engineering Applications of Artificial Intelligence, European Journal of Industrial Engineering, European Journal of Operational Research, Evolutionary Computation, Fundamenta Informaticae, Future Generation Computer Systems, IEEE Computational Intelligence Magazine, IEEE Transactions on Automation Science and Engineering, IEEE Transactions on Evolutionary Computation, IEEE Transactions on Systems, Man, and Cybernetics B, IET Intelligent Transport Systems, INFORMS Journal on Computing, International Journal of Applied Mathematics and Computer Science, International Journal of Approximate Reasoning, Journal of Artificial Intelligence Research, International Journal of Computational Intelligence Systems, International Journal of Metaheuristics, International Journal of Natural Computing Research, International Journal of Systems Science, International Transactions in Operational Research, Journal of Artificial Evolution and Applications, Journal of Automated Reasoning, Journal of Data Semantics, Journal of Experimental Algorithms, Journal of Experimental & Theoretical Artificial Intelligence, Journal of Global Optimization, Journal of Industrial and Management Optimization, Journal of Heuristics, Journal of Mathematical Modelling and Algorithms, Journal of the Operational Research Society, Machine Learning, Mathematical Methods of Operations Research, Mathematical Problems in Engineering, Multi-Agent and Grid Systems, Networks, Neural Networks, OMEGA, Operations Research, Operations Research Letters, Optimization Methods and Software, Production Planning and Control, RAIRO – Operations Research – Recherche Opérationnelle, Soft Computing, Swarm Intelligence, Transportation Science

International Conferences:

Conference on Automated Deduction, CADE (1998), Constraint Programming, CP (2007, 1997), International Joint Conference on Artificial Intelligence (2003, 2001), National Conference on Artificial Intelligence, AAAI (2002), European Conference on Artificial Intelligence, ECAI (2002, 2000), European Conference on Genetic Programming, EuroGP (2000), First Spanish Congress on Evolutionary and Bio-inspired Algorithms (AEB'02), German Conference on Artificial Intelligence, IEEE Multi-conference on Systems and Control (2009), KI (1998), Italian Conference on Theoretical Computer Science (2007), International Network Optimization Conference (2009), International Conference on Integration of Artificial Intelligence and Operations Research Techniques in Constraint Programming for Combinatorial Optimization Problems (2009), Metaheuristics International Conference, MIC (1999, 1997), Pacific Symposium on Biocomputing (2009)

BENCHMARK LIBRARIES

Together with Holger Hoos I created and maintained SATLIB, an online collection of benchmark instances and solvers for propositional satisfiability problems located at <http://www.satlib.org>.

bigskip

I have contributed to generate ACLIB, the Algorithm Configuration Library that is available at <http://www.aclib.net/>. The goal of ACLib is to define a set of standard benchmarks for algorithm configuration in order to provide a solid foundation for empirical science in the field.

MEMBERSHIP IN SCHOLARLY SOCIETIES

- Member of ACM.
- Fellow of IEEE.
- Member of INFORMS.

TEACHING

COURSES

- *Heuristic Optimization* SS 2016, Université Libre de Bruxelles, 5 ECTS.
- *Heuristic Optimization* SS 2015, Université Libre de Bruxelles, 5 ECTS.
- *Heuristic Optimization* SS 2014, Université Libre de Bruxelles, 5 ECTS.
- *Heuristic Optimization* SS 2013, Université Libre de Bruxelles, 5 ECTS.
- *Heuristic Optimization* SS 2012, Université Libre de Bruxelles, 5 ECTS.
- *Heuristic Optimization* SS 2011, Université Libre de Bruxelles, 5 ECTS.
- *Heuristic Optimization* SS 2010, Université Libre de Bruxelles, 4 ECTS.
- *Heuristic Optimization* SS 2009, Université Libre de Bruxelles, 4 ECTS.
- *Stochastische lokale Suche* SS 2005, TU Darmstadt, (V2+Ü1).
- *Grundzüge der Informatik II* SS 2004, TU Darmstadt, (V4+Ü4).
- *Stochastische lokale Suche* WS 2003/04, TU Darmstadt, (V2+Ü1).
- *Stochastische lokale Suche* WS 2002/03, TU Darmstadt, (V2+Ü1).
- *Grundzüge der Informatik IV* SS 2002, TU Darmstadt, (V4+Ü2).
- *Lokale Suchverfahren und Metaheuristiken* WS 2001/02, TU Darmstadt, (V2+Ü1).
- *Grundzüge der Informatik II* SS 2001, TU Darmstadt, (V5+Ü4).
- *Einführung in die Programmierung mit Prolog* WS 2000/01, TU Darmstadt, (V2+Ü2).
- *Lokale Suchverfahren und Metaheuristiken* SS 2000, TU Darmstadt, (V2).

SEMINARS

- *KI-Technologien zur Verarbeitung natürlicher Sprache* SS 2003, TU Darmstadt, (S2).
- *Exakte Algorithmen und Lokale Suche: hybride Ansätze* WS 2002/03, TU Darmstadt, (S2).
- *Künstliche Intelligenz und Spiele* SS 2002, TU Darmstadt, (S2).

PRACTICAL COURSES

- *Lokale Suchverfahren* WS 2005/06, TU Darmstadt, (P4).
- *Lokale Suchverfahren* SS 2004, TU Darmstadt, (P4).

- *Lokale Suchverfahren* SS 2003, TU Darmstadt, (P4).
- *Lokale Suchverfahren* SS 2002, TU Darmstadt, (P3).
- *Planungssysteme* WS 2001/02, TU Darmstadt, (P3).
- *Lokale Suchverfahren* WS 2000/01, TU Darmstadt, (P3).
- *Lokale Suchverfahren* WS 1998/99, TU Darmstadt, (P3).

SUPERVISED POSTDOCS

- Franco Mascia. Postdoctoral researcher at IRIDIA from 01/2011.
- Manuel López-Ibáñez. Postdoctoral researcher at IRIDIA from 03/2009.
- Marie-Éléonore Marmion. Postdoctoral researcher at IRIDIA from 09/2012 to 08/2013.
- Irina Dumitrescu. Marie Curie Fellow at the Intellectics Group from 2/2002 to 1/2004.

SUPERVISED PHD STUDENTS

- Hayfa Hammami. IRIDIA, Université Libre de Bruxelles, started October 2015.
- Alberto Franzin. IRIDIA, Université Libre de Bruxelles, started November 2014.
- Federico Pagnozzi. IRIDIA, Université Libre de Bruxelles, started October 2014.
- Leslie Perez. IRIDIA, Université Libre de Bruxelles, started February 2012.
- Zhi (Eric) Yuan. IRIDIA, Université Libre de Bruxelles, started November 2007.
- Leonardo Bezerra. *A Component-wise Approach to Multi-objective Evolutionary Algorithms*. IRIDIA, Université Libre de Bruxelles, defended on July 4, 2016.
- Mohamed Saifullah bin Hussin. *Stochastic Local Search Algorithms for Single and Bi-objective Quadratic Assignment Problems*, IRIDIA, Université Libre de Bruxelles, defended on December 17, 2015.
- Jérémie Dubois-Lacoste. *Anytime Local Search for Multi-Objective Combinatorial Optimization: Design, Analysis and Automatic Configuration*, Université Libre de Bruxelles, defended on May 26, 2014.
- Marco Chiarandini. *Iterated Local Search for Constrained Optimization Problems*, TU Darmstadt, Germany, defended on July 8, 2005.
- Luis Paquete. *Metaheuristics for Multi-Objective Optimization Problems*, TU Darmstadt, defended on July 11, 2005.
- Matthijs den Besten. *Iterated Local Search and Variable Neighborhood Descent for Scheduling Problems: An Empirical Investigation*, TU Darmstadt, Germany, defended on October 6, 2004.

CO-SUPERVISED PHD STUDENTS

- Nguyen Thi Thanh Dang. KU Leuven, started 2012.
- Sabrina Oliveira. IRIDIA, Université Libre de Bruxelles, started November 2008.
- Stefan Eppe. *Three Contributions to the Promethee II Method*, CoDE–SMG, Université Libre de Bruxelles, defended on July 2, 2014.
- Tianjun Liao. *Population-based Heuristic Algorithms for Continuous and Mixed Discrete-Continuous Optimization Problems*. IRIDIA, Université Libre de Bruxelles, defended on June 28, 2013.
- Marco Montes de Oca. *Incremental Social Learning in Swarm Intelligence Systems*. IRIDIA, Université Libre de Bruxelles, defended on July 1, 2011.
- Prasanna Balaprakash. *Estimation-based Metaheuristics for Stochastic Combinatorial Optimization: Case Studies in Stochastic Routing Problems*. Université Libre de Bruxelles, Belgium, defended on January 26, 2010.
- Max Manfrin. IRIDIA, Université Libre de Bruxelles. He stopped the PhD to take a position at the European Patent Office.
- Jodelson Sabino. *Otimização com colônia de formigas aplicada à programação de operações de locomotivas de manobras*, Pontifícia Universidade Católica do Rio de Janeiro, defended on March 31, 2008.

HOSTED GUEST RESEARCHERS AND PROFESSORS

- Antonio David Masegosa Arredondo. Guest researcher from 9/2016 to 11/2016 (3 months).
- Dogan Aydin. Guest professor from 4/2014 to 1/2015.
- Gülesin Sena Das. Guest professor from 4/2014 to 9/2014.
- Holger H. Hoos. Chaire Internationale of ULB hosted at IRIDIA from 3/2014 to 4/2014.
- Roberto Tavares. Guest researcher at IRIDIA from 07/2012 to 12/2012 (6 months).
- Daniel Molina. Guest researcher at IRIDIA from 12/2011 to 1/2012 (2 months).
- Andrea Roli. Guest researcher at IRIDIA from 10/2009 to 1/2010, supported by the Brains Back to Brussels programme.
- António Gaspar Lopes da Cunha. Guest researcher at IRIDIA in 5/2008.
- Holger H. Hoos. Guest researcher at IRIDIA in 9/2007.
- Ruben Ruiz. Guest researcher at IRIDIA from 12/2006 to 2/2007.
- Ruben Ruiz. Guest researcher at TU Darmstadt from 12/2004 to 2/2005.

SUPERVISED GUEST PHD STUDENTS

- Garazi Zabalo. University of Siena, Italy. Guest student 11/2016 to 3/2017 (5 months).
- Pedro Alfaro Fernández. Guest student 9/2015 to 12/2015 (4 months).
- Hayfa Hammami. Guest student 1/2015-10/2015.
- Elena Rocchi. Guest student 9/2014-2/2015 (6 months).
- Stefano Novellani. Guest student 2/2013-7/2013 (6 months).
- Benjamin Lacroix. Guest student 9/2012-10/2012 (5 weeks).
- Victor Gal. Guest student 9/2012.
- Francisco J. Rodríguez Díaz. Guest student 3/2012 to 5/2012.
- Victor Gal. Guest student from 3/2012 to 4/2012.
- Benjamin Lacroix. Guest student 2/2012.
- Marie-Éléonore Marmion. Guest student 2/2012.
- Stefanie Kritzinger. Guest student from 3/2011 to 5/2011.
- Stefano Benedettini. Guest student from 10/2010 to 12/2010.
- Dogan Aydin. Guest student from 2/2010 to 9/2010.
- Franco Mascia. Guest student from 4/2010 to 7/2010.
- Sara Ceschia. Guest student from 1/2010 to 6/2010.
- Jessica Rivero Espinosa. Guest student from 9/2009 to 11/2009.
- Matteo Borrotti. Guest student from 3/2009 to 7/2009.
- Colin Twomey. Guest student from 10/2008 to 6/2009.
- Francesco Sambo. Guest student from 10/2008 to 6/2009.
- Cristina Texeira. Guest student from 9/2008 to 11/2008.
- Fabio Rossi. Guest student from 6/2008 to 8/2008.
- Giacomo Di Tollo. Guest student from 1/2008 to 6/2008.
- Thijs Urlings. Guest student from 9/2007 to 11/2007.
- Marco Pranzo. Guest student from 1/2002 to 6/2002.
- Mauro Birratarì. Guest student from 4/2001 to 3/2002.

HABILITATION COMMITTEE MEMBERSHIP

- Maria Cristina Riff Rojas. *Informatique Émergente : Stratégies pour la Résolution de Problèmes Combinatoires Difficiles avec Contraintes*. Université Paris Sud, July 2014.
- Laetitia Jourdan. *Solving Scheduling Problems from High-Level Models*. Université de Lille 1, September 2010.

PHD COMMITTEE MEMBERSHIP

- Jesús Sánchez-Oro Calvo. *Graph Layout Problems: A Metaheuristic Approach*. Universidad Rey Juan Carlos, Móstoles, Spain, December 2016.
- Martim Joyce-Moniz. *Models and Methods for Traffic Engineering Problems with Single-path Routing*. Université libre de Bruxelles, Brussels, Belgium, October 2016.
- Andreagioanni Reina. *Engineering Swarm Systems: A Design Pattern for the Best-of-n Decision Problem*. Université libre de Bruxelles, Brussels, Belgium, July 2016.
- Gabriele Valentini. *The Best-of-n Problem in Robot Swarms*. Université libre de Bruxelles, Brussels, Belgium, July 2016.
- Tarik Roukny Ornia. *Financial Networks, Complexity and Systemic Risk*. Université libre de Bruxelles, Brussels, Belgium, January 2016.
- Viktor Gál. *Image Similarity in Medical Images*. Universiteit Gent, Gent, Belgium, December 2015.
- Zhe Cong. *Efficient Optimization Methods for Freeway Management and Control*, Delft University of Technology, The Netherlands, November 2015.
- Audrey Cerqueus. *Bi-objective Branch-and-cut Algorithms Applied to the Binary Knapsack Problem: Surrogate Bound Sets, Dynamic Branching Strategies, Generation and Exploitation of Cover Inequalities..* Université de Nantes, France, November 2015.
- Alessia Violin. *Mathematical programming approaches to pricing problems*. Université Libre de Bruxelles, Belgium, December 2014.
- Benoit Penelle. *Système de réalité virtuelle d'aide à la réalisation et à l'évaluation d'exercices physiques*. Université Libre de Bruxelles, Belgium, April 2014.
- Mike Preuss. *Multimodal Optimization by Means of Evolutionary Algorithms*. Universität Dortmund, Germany, November 2013.
- François Picalausa. *Guarded Structural Indexes : Theory and Application to Relational RDF Databases*. Université Libre de Bruxelles, Belgium, September 2013.
- Eliseo Ferrante. *Information Transfer in a Flocking Robot Swarm*. Université Libre de Bruxelles, Belgium, August 2013.
- Giovanni Pini. *Towards Autonomous Task Partitioning in Swarm Robotics*. Université Libre de Bruxelles, Belgium, June 2013.
- Rune Larsen. *Optimization Methods for Real Life Scheduling Problems*. University of Southern Denmark, Denmark, June 2012.
- Marie-Éléonore Marmion. *Recherche locale et optimisation combinatoire : De l'analyse structurale d'un problème à la conception d'algorithmes efficaces*. Université de Lille 1, France, December 2011.
- Sebastien Mouthuy. *Constraint-Based Very Large-Scale Neighborhood Search*. Université catholique de Louvain, Louvain-la-Neuve, Belgium, September 2011.
- Alexandre Campo. *On the design of self-organized decision making in robot swarms*. Université Libre de Bruxelles, Belgium, May 2011.
- Aykut Ozsoy. *An Integer Programming Approach to Layer Planning in Communication Networks*. Université Libre de Bruxelles, Belgium, May 2011.
- Matteo Borrotti. *An Evolutionary Approach to the Design of Experiments for Combinatorial Optimization with an Application to Enzyme Engineering*. Università di Bologna, Bologna, Italy, March 2011.

- Semya Elaoud. *Genetic & Exact Methods to Solve Multi-objective Optimization Problems*. Université de Mons, Belgium, February 2011.
- Álvaro Silvestre Fialho. *Adaptive Operator Selection for Optimization*. Université Paris-Sud 11, France, December 2010.
- Franco Mascia. *Analysis of Reactive Search Optimisation Techniques for the Maximum Clique Problem and Applications*. University of Trento, Italy, December 2010.
- Elisa Cilia. *Statistical and relational learning for understanding enzyme function*. University of Trento, Italy, December 2010.
- Paolo Campigotto. *A Reactive Search Optimization Approach to Interactive Decision Making*. University of Trento, Italy, December 2010.
- Madjid Khichane. *Optimisation sous contraintes par Intelligence Collective Auto-adaptive*. Université de Lyon 1, France, October 2010.
- Rehan O'Grady. *Morphologically responsive self-assembling robots*. Université Libre de Bruxelles, Belgium, September 2010.
- Jean-Noël Monette. *Solving Scheduling Problems from High-Level Models*. Université catholique de Louvain, May 2010.
- Thibaut Lust. *New Metaheuristics for Solving MOCO Problems: Application to the Knapsack Problem, the Traveling Salesman Problem and IMRT Optimization*. Université de Mons, Belgium, December 2009.
- Daniel Porumbel. *Algorithmes Heuristiques et Techniques d'Apprentissage—Applications au Problème de Coloration de Graphe*. Université de Angers, France, November 2009.
- Alexandru-Adrian Tantar. *Hybrid Parallel Metaheuristics for Molecular Docking on Computational Grids*. Université de Lille 1, France, June 2009.
- Christophe Philemotte. *The Gestalt Heuristic: Dynamic and Online Meta-modeling as Improvement Method to the Metaheuristic Process*. Université Libre de Bruxelles, Belgium, December 2008.
- Shervin Nouyan. *Teamwork in a swarm of robots An experiment in search and retrieval*. Université Libre de Bruxelles, Belgium, September 2008.
- Anders L. Christensen. *Fault Detection in Autonomous Robots*. Université Libre de Bruxelles, Belgium, June 2008.
- Krzysztof Socha. *Ant Colony Optimization for Continuous and Mixed-Variable Domains*. Université Libre de Bruxelles, Belgium, May 2008.
- Magnus Agren. *Constraint-based local search*. Uppsala Universitet, Sweden. January 2008.
- David Mertens. *Building Acceptable Classification Models for Financial Engineering Applications*. Katholieke Universiteit Leuven, Belgium. January 2008.
- Enda Ridge. *Design of Experiments for Tuning Metaheuristics*. The University of York, UK, December 2007.
- Eva Vallada Regalado. *Secuenciación en talleres de flujo con fechas de entrega. Nuevos Métodos Metaheurísticos y Computación Paralela*, Universidad Politécnica de Valencia, Spain, April 2007.
- Thomas Halva Labella. *Division of Labour in Groups of Robots*, Université Libre de Bruxelles, Belgium, February 2007.
- Johan Parent. *Study of the Impact of Genotype Compression for Genetic Programming, an Application to Data Compression*, Vrije Universiteit Brussel, Belgium, September 2006.

- Anne Defaweux. *Evolutionary Transitions as a Metaphor for Compositional Search: Definition and Evaluation of a New Optimisation Algorithm*, Vrije Universiteit Brussel, Belgium, April 2006.
- Leonora Bianchi. *Ant Colony Optimization and Local Search for the Probabilistic Traveling Salesman Problem: A case Study in Stochastic Combinatorial Optimization*, Université Libre de Bruxelles, Belgium, July 2006.

EXTERNAL EXAMINER OF PHD THESES

- Christopher Wesley Cleghorn. *Particle Swarm Optimization: Empirical and Theoretical Stability Analysis*. University of Pretoria, Hatfield, South Africa, 2017.
- Elena Rocchi. *Model-based Heuristics for Combinatorial Optimization*. Università di Bologna, Bologna, 2016.
- Dada Emmanuel Gbenga. *The Fusion of Particle Swarm Optimization (PSO) and Interior Point Method (IPM) as Cooperative Movement Control Algorithm in Swarm Robotics*. University of Malaya, Kuala Lumpur, Malaysia, 2015.
- Mohammadreza Bonyadi. *Particle Swarm Optimization: Theoretical Analysis, Modifications and Applications to Constrained Optimization Problems*, The University of Adelaide, Australia, 2014.
- Antoine Dymond. *Tuning Optimization Algorithms under Multiple Objective Function Evaluation Budgets*, School of Computing, University of Pretoria, South Africa, 2014.
- Steven Halim. *An Integrated White+Black Box Approach for Designing and Tuning Stochastic Local Search*, School of Computing, National University of Singapore, Singapore, 2009.
- Yiliang Xu. *Meta-Heuristic Algorithm Development for Combinatorial Optimization within an Integrated Problem Solving Environment*, School of Electrical & Electronic Engineering, Nanyang Technological University, Singapore, 2006.

SUPERVISED MSc. STUDENTS

- Robert Vanden Eynde. *Local Search Algorithms for Examination Timetabling*. Msc. Thesis, 2017.
- Antonio Maria Fischarelli. *Automatic Tuning and Configuration of Metaheuristics for Inventory Routing Problem*. Msc. Thesis, 2016.
- Aurelien Marion. *Fast heuristics for the Longest Common Subsequence Problem*. Msc. Thesis, 2015.
- Javier Perez. *Automatic Design of Ant Colony Optimization Algorithms*. Msc. Thesis, 2014.
- Luc Coene. *Two-Phase and Pareto Local Search for Multi-objective Continuous Optimization*. Msc. Thesis, 2013.
- Nils Fagerburg. *Solving NP-complete Puzzles with Exact and Heuristic Methods*. Msc. Thesis, 2013.
- Vincent Stradiot. *Local search for the Weighted Maximum Clique Problem*. Msc. Thesis, 2013.
- Andreea Radulescu. *Automatically Improving the Anytime Behavior of Multiobjective Evolutionary Algorithms*. Msc. Thesis, 2012.

- Michael Maur. *Adaptive Ant Colony Optimization for the Traveling Salesman Problem*. MSc. Thesis, 2010.
- Jérémie Dubois–Lacoste. *A study of Pareto and Two-Phase Local Search Algorithms for Biobjective Permutation Flowshop Scheduling*. MSc. Thesis, 2009.
- Renaud Lenne. *Analyse comparative d’algorithmes de recherche locale pour la résolution du problème de la médiane génomique*. MSc. Thesis, 2007.
- Trung Truc Huynh. *An Ant Colony Optimization Algorithm for Biobjective Permutation Flowshop Problems*. MSc. Thesis, 2007.
- Jens Gimmler. *Metaheuristiken zur kontinuierlichen, globalen Optimierung*. Diplomarbeit (MSc. Thesis), 2005.
- Thomas Ries. *Stochastische lokale Suche zum Lösen von 0–1 Integerprogrammen*. Diplomarbeit (MSc. Thesis), TU Darmstadt, 2005.
- Oliver Korb. *Heuristiken zur Lösung des global rigiden Protein–Ligand–Docking–Problems*. Diplomarbeit (MSc. Thesis), TU Darmstadt, 2004.
- Frank Hutter. *Stochastic Local Search for Solving the Most Probable Explanation Problem in Bayesian Networks*. Diplomarbeit (MSc. Thesis), TU Darmstadt, 2004.
- Manuel López-Ibáñez. *Multi-Objective Ant Colony Optimization*. Diplomarbeit (MSc. Thesis), TU Darmstadt, 2004.
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EXTENDED ABSTRACTS AND OTHERS

The extended abstracts below have undergone a formal (although sometimes light) refereeing process.

- EA.48** Jérémie Dubois-Lacoste and Thomas Stützle. Configuring a Stigmergy-based Traffic Light Controller. GECCO (Companion) 2016. pp. 137–138, ACM Press, New York, NY.
- EA.47** Manuel López-Ibáñez, Leonardo Bezerra, and Thomas Stützle. Deconstructing Multi-objective Evolutionary Algorithms. ORBEL 28, 28th Annual Conference of the Belgian Operations Research Society, Mons, Belgium, 2014. 2 pages
- EA.46** Tianjun Liao and Thomas Stützle. A Simple and High Performing Competitive-cooperative Hybrid Algorithm for Black-box Continuous Optimization. ORBEL 28, 28th Annual Conference of the Belgian Operations Research Society, Mons, Belgium, 2014. 2 pages
- EA.45** Manuel López-Ibáñez, Franco Mascia, Jérémie Dubois-Lacoste, and Thomas Stützle. From Grammars to Parameters: Automatic Design of Iterated Greedy Algorithms. ORBEL 27, 27th Annual Conference of the Belgian Operations Research Society, Kortrijk, Belgium, 2013. 2 pages
- EA.44** Franco Mascia, Mauro Birattari, and Thomas Stützle. Predicting Parameter Configurations for Tuning Effective Algorithms on Very Large Instances. ORBEL 27, 27th Annual Conference of the Belgian Operations Research Society, Kortrijk, Belgium, 2013. 2 pages
- EA.43** Marie-Éléonore Marmion, Franco Mascia, Manuel López-Ibáñez, and Thomas Stützle. An Approach to the Automatic Configuration of a Generalized Metaheuristic Structures. ORBEL 27, 27th Annual Conference of the Belgian Operations Research Society, Kortrijk, Belgium, 2013. 2 pages
- EA.42** Manuel López-Ibáñez, Jérémie Dubois-Lacoste, Mauro Birattari, and Thomas Stützle. Automatic configuration of optimization algorithms. Matheuristics 2012, Fourth International Workshop on Model-based Metaheuristics, Angra dos Reis, Brazil, September 17–20, 2012.

- EA.41** Tianjun Liao, Marco A. Montes de Oca, Dogan Aidin, Thomas Stützle, and Marco Dorigo. An Incremental Ant Colony Algorithm with Local Search for Continuous Optimization. ORBEL 26, 26th Annual Conference of the Belgian Operations Research Society, Bruxelles, Belgium, February 2-3, 2012. 2 pages.
- EA.40** Jérémie Dubois-Lacoste, Manuel López-Ibáñez and Thomas Stützle. Anytime Improvements for Pareto Local Search. ORBEL 26, 26th Annual Conference of the Belgian Operations Research Society, Bruxelles, Belgium, February 2-3, 2012. 2 pages.
- EA.39** Manuel López-Ibáñez and Thomas Stützle. Automatically Improving the Anytime Behaviour of Optimisation Algorithms. ORBEL 26, 26th Annual Conference of the Belgian Operations Research Society, Bruxelles, Belgium, February 2-3, 2012. 2 pages.
- EA.38** Franco Mascia, Paola Pellegrini, Thomas Stützle, and Mauro Birattari. A Case Study on the Effectiveness of Parameter Adaptation Schemes using Reactive Search. ORBEL 26, 26th Annual Conference of the Belgian Operations Research Society, Bruxelles, Belgium, February 2-3, 2012. 2 pages.
- EA.37** Jérémie Dubois-Lacoste, Manuel López-Ibáñez, and Thomas Stützle. Automatic Configuration of TPLS+PLS Algorithms for Bi-objective Flow-Shop Scheduling Problems. ALIO/EURO 2011, Workshop on Applied Combinatorial Optimization, Porto, Portugal, May 2011.
- EA.36** Manuel López-Ibáñez, and Thomas Stützle. Automatic Design of Ant Colony Optimization Algorithms for Bi-objective Problems. In Proceedings of ORBEL 25, 25th Annual Conference of the Belgian Operations Research Society. Ghent, Belgium, 2011.
- EA.35** Jérémie Dubois-Lacoste, Manuel López-Ibáñez, and Thomas Stützle. Anytime Two-Phase Local Search. In Proceedings of ORBEL 25, 25th Annual Conference of the Belgian Operations Research Society. Ghent, Belgium, 2011.
- EA.34** Manuel López-Ibáñez, Luis Paquete, and Thomas Stützle. Graphical tools for the analysis of bi-objective optimization algorithms. In GECCO 2010 Workshop on theoretical aspects of evolutionary multiobjective optimization. GECCO (Companion) 2010. pp. 1959–1962, ACM Press, New York, NY.
- EA.33** Jérémie Dubois-Lacoste, Manuel López-Ibáñez, and Thomas Stützle. A Hybrid Algorithm for Bi-objective Flowshop Scheduling. In Proceedings of ORBEL 24, 24th Annual Conference of the Belgian Operations Research Society, pages 92–93. Liège, Belgium, 2010.
- EA.32** Prasanna Balaprakash, Mauro Birattari, Thomas Stützle and Marco Dorigo. Effective Estimation-based Stochastic Local Search Algorithms for Stochastic Routing Problems. In Proceedings of ORBEL 24, 24th Annual Conference of the Belgian Operations Research Society, pages 136–137. Liège, Belgium, 2010.
- EA.31** Renaud Lenne, Christine Solnon, Thomas Stützle, and Eric Tannier. Advances on Stochastic Local Search Algorithms for the Genomic Median Problem. In Proceedings of META 2008, International Conference on Metaheuristics and Nature Inspired Computation, 2 pages. Hammamet, Tunisia, 2008.
- EA.30** Prasanna Balaprakash, Mauro Birattari, Thomas Stützle and Marco Dorigo. Estimation-based Stochastic Local Search Algorithms for Stochastic Routing Problems. In Proceedings of META 2008, International Conference on Metaheuristics and Nature Inspired Computation, 2 pages. Hammamet, Tunisia, 2008.

- EA.29** Prasanna Balaprakash, Mauro Birattari, Thomas Stützle and Marco Dorigo. Applications of Estimation-based SLS Algorithms to Stochastic Routing Problems. In Proceedings of Matheuristics 2008, Second International Workshop on Model-based Metaheuristics, Bertinoro, Italy, 2008.
- EA.28** Renaud Lenne, Christine Solnon, Thomas Stützle, Eric Tannier and Mauro Birattari. Effective Stochastic Local Search Algorithms for the Genomic Median Problem. In Enda Ridge, Thomas Stützle, Mauro Birattari, and Holger H. Hoos, Proceedings of *SLS-DS 2007, Doctoral Symposium on Engineering Stochastic Local Search Algorithms*, pages 1–5. Brussels, Belgium, September, 2007.
- EA.27** Marco A. Montes de Oca, Thomas Stützle, Mauro Birattari and Marco Dorigo. Composing Particle Swarm Optimization Algorithms. In Enda Ridge, Thomas Stützle, Mauro Birattari, and Holger H. Hoos, Proceedings of *SLS-DS 2007, Doctoral Symposium on Engineering Stochastic Local Search Algorithms*, pages 6–10. Brussels, Belgium, September, 2007.
- EA.26** Mohamed Saifullah Bin Hussin, Thomas Stützle and Mauro Birattari. A Study of Stochastic Local Search Algorithms for the Quadratic Assignment Problems. In Enda Ridge, Thomas Stützle, Mauro Birattari, and Holger H. Hoos, Proceedings of *SLS-DS 2007, Doctoral Symposium on Engineering Stochastic Local Search Algorithms*, pages 11–15. Brussels, Belgium, September, 2007.
- EA.25** Prasanna Balaprakash, Mauro Birattari, Thomas Stützle and Marco Dorigo. Sampling Strategies and Local Search for Stochastic Combinatorial Optimization. In Enda Ridge, Thomas Stützle, Mauro Birattari, and Holger H. Hoos, Proceedings of *SLS-DS 2007, Doctoral Symposium on Engineering Stochastic Local Search Algorithms*, pages 16–20. Brussels, Belgium, September, 2007.
- EA.24** Max Manfrin, Thomas Stützle, Mauro Birattari, and Marco Dorigo. Communication Policies for a Parallel Multi-Colony ACO Algorithm with Identical Colonies. In Enda Ridge, Thomas Stützle, Mauro Birattari, and Holger H. Hoos, Proceedings of *SLS-DS 2007, Doctoral Symposium on Engineering Stochastic Local Search Algorithms*, pages 31–35. Brussels, Belgium, September, 2007.
- EA.23** Trung Truc Huynh, Thomas Stützle, Mauro Birattari, and Yves De Smet. A study of ant colony optimization algorithms for a biobjective permutation flowshop problem. In Enda Ridge, Thomas Stützle, Mauro Birattari, and Holger H. Hoos, Proceedings of *SLS-DS 2007, Doctoral Symposium on Engineering Stochastic Local Search Algorithms*, pages 58–62. Brussels, Belgium, September, 2007.
- EA.22** Prasanna Balaprakash, Birattari, Thomas Stützle and Marco Dorigo. An Experimental Study of Estimation-based Metaheuristics for the Probabilistic Traveling Salesman Problem. In V. Maniezzo, R. Battiti, and J.-P. Watson, editors, Proceedings of LION 2007bis: Learning and Intelligent Optimization, 4 pages, Trento, Italy, 2007.
- EA.21** Mauro Birattari, Prasanna Balaprakash, Thomas Stützle, and Marco Dorigo. Estimation-based Local Search for the Probabilistic Traveling Salesman Problem. In M. Gendreau, T. G. Crainic, L.-M. Rousseau, and P. Soriano, editors, *Proceedings of MIC 2007, the 7th Metaheuristics International Conference*, CIRRELT, Montreal, Canada, 2007. (3 pages)
- EA.20** Marco Montes de Oca, Thomas Stützle, Mauro Birattari and Marco Dorigo. On the Performance Analysis of Particle Swarm Optimisers. AISB Quarterly No. 124. The Society for the Study of Artificial Intelligence and Simulation of Behaviour. Brighton, United Kingdom. Autumn/Winter 2006. pp. 6-7.

- EA.19** Max Manfrin, Mauro Birattari, Thomas Stützle and Marco Dorigo. Parallel Multicolony ACO Algorithm With Exchange of Solutions. In Proceedings of BNAIC 2006, the 18th Belgium–Netherlands Conference on Artificial Intelligence, pages 409–410, Namur, Belgium, 2006.
- EA.18** Marco Chiarandini and Thomas Stützle Local Search Algorithms for Graph Set T -Colouring and Frequency Assignment. XXXVII Annual Conference of the Italian Operational Research Society, Ceseny, Italy, page 104, September 2006.
- EA.17** Marco Chiarandini, Irina Dumitrescu and Thomas Stützle. Large Neighbourhoods in Graph Colouring Problems: An Empirical Analysis In abstract proceedings of Matheuristics 2006, 1st Workshop on Mathematical Contributions to Metaheuristics, Forli, Italy, 2006. Available online at <http://astarte.csr.unibo.it/matheuristics2006/abstracts.htm>.
- EA.16** Mauro Birattari and Thomas Stützle. F-races: A tool for the automatic configuration of stochastic local search algorithms. Proceedings of the ECCO XIX–CO 2006 Joint Meeting, pages 40–41, 2006.
- EA.15** Marco Chiarandini, Thomas Stützle, and Mauro Birattari Applying Stochastic Local Search Methods to Timetabling: An Engineering Process. XXXVI Annual Conference of the Italian Operational Research Society, Camerino, Italy, page 74, 2005.
- EA.14** Oliver Korb, Thomas Stützle, Stefan Kast, and Thomas Exner. Protein-Ligand Docking: The Energy Landscape View. Bunsentagung, Frankfurt, Germany, May 5–7, 2005.
- EA.13** Oliver Korb, Thomas Stützle, Stefan Kast, and Thomas Exner. When Ants Dock Molecules. 19th Molecular Modelling Workshop, Computer-Chemie-Centrum, Erlangen, Germany, 2005.
- EA.12** Jens Gimmler, Thomas Stützle, Thomas Exner, and Oliver Korb. Continuous Global Optimization: Finding the Right Algorithm for a Problem. 19th Molecular Modelling Workshop, Computer-Chemie-Centrum, Erlangen, Germany, 2005.
- EA.11** Ruben Ruiz, Thomas Stützle and Eva Vallada. An Iterated Greedy Heuristic for Flowshop Problems with Sequence Dependent Setup Times. XVIII European Chapter on Combinatorial Optimization (ECCO'05), Minsk, Belarus, 2005.
- EA.10** Ruben Ruiz, Thomas Stützle and Concepción Maroto. A Simple and Effective Iterated Greedy Algorithm for the Flowshop Scheduling Problem. 20th European Conference on Operational Research, Rhodes, Greece, 2005.
- EA.9** Ruben Ruiz and Thomas Stützle. Un Algoritmo Iterativo Voraz para el Problema del Taller de Flujo. 28 Congreso Nacional de Estadística e Investigación Operativa (SEIO'04), Cádiz, Spain.
- EA.8** Oliver Korb, Thomas Stützle, Stefan Kast, and Thomas Exner. On the Occurrence of Docking Funnels: Identification and Characterization. 18th Molecular Modelling Workshop, Computer-Chemie-Centrum, Erlangen, Germany, 2004.
- EA.7** Luis Paquete, Marco Chiarandini and Thomas Stützle. A Study of Local Optima in the Biobjective Travelling Salesman Problem. Workshop on Multiple Objective MetaHeuristics, Paris, France, 2002.
- EA.6** Helena R. Lourenco, Olivier Martin, and Thomas Stützle. A Beginner's Introduction to Iterated Local Search. In *Proceedings of the 4th Metaheuristics International Conference*, pages 1–6, Porto, Portugal, 2001.

- EA.5** Matthijs den Besten and Thomas Stützle. Neighborhoods Revisited: An Experimental Investigation into the Effectiveness of Variable Neighborhood Descent for Scheduling. In *Proceedings of the 4th Metaheuristics International Conference*, pages 545–550, Porto, Portugal, 2001.
- EA.4** Matthijs den Besten, Thomas Stützle, and Marco Dorigo. An Ant Colony Optimization Application to the Single Machine Total Weighted Tardiness Problem. In Marco Dorigo, Martin Middendorf and Thomas Stützle, editors, *Proceedings of ANTS'2000 – From Ant Colonies to Artificial Ants: Second International Workshop on Ant Algorithms*. pages 39–42, Brussels, Belgium, September 7–9, 2000.
- EA.3** Holger H. Hoos and Thomas Stützle. Developing New Concepts to Characterise Empirical Phenomena. In Achim Hoffmann, editor, *Proceedings of the IJCAI'99 Workshop on Empirical AI*, Stockholm, Sweden, pages 59–67, 1999.
- EA.2** Thomas Stützle and Holger H. Hoos. Analyzing the Run-time Behaviour of Iterated Local Search for the TSP. In Celso C. Ribeiro, editor, *Proceedings of the 3rd Metaheuristics International Conference*, pages 449–453, Angra Dos Reis–Rio de Janeiro, Brasil, July 19–23, 1999.
- EA.1** Thomas Stützle and Holger H. Hoos. The $MAX-MIN$ Ant System and Local Search for Combinatorial Optimization Problems: Towards Adaptive Tools for Global Optimization. In *Proceedings of the 2nd International Conference on Metaheuristics*, pages 191–193, Sophia Antipolis, France, July 21–24, 1997.

TALKS

PLENARY TALKS AT CONFERENCES

- PT.20** Thomas Stützle. *Automated Algorithm Design: Automatically Generating High-performance Algorithms*. Plenary talk at the Applications of Optimization Workshop, the Annual Meeting of the Danish Operations Research Society, Copenhagen, Denmark, May 2017.
- PT.19** Thomas Stützle. *From Manual Algorithm Engineering towards Automated Algorithm Design from Frameworks*. Plenary talk given at the Evolutionary Multi-objective Conference (EMO 2017), Münster, Germany, 2017.
- PT.18** Thomas Stützle. *Automatic Algorithm Configuration: Methods, Applications, and Perspectives*. Plenary talk at the International Joint Conference on Computational Intelligence, Porto, Portugal, November 2016.
- PT.17** Thomas Stützle. *Automatically generating high-performance heuristics from flexible algorithm frameworks*. Plenary talks given at PATAT 2016, 11th Conference on Practice and Theory of Automated Timetabling, Udine, Italy, August 2016.
- PT.16** Thomas Stützle. *Automated Algorithm Configuration: Advances and Perspectives*. Plenary talk given at the Foundational Workshop for a EURO Working Group on Optimization and Data Science, Leuven, Belgium, April 2016.
- PT.15** Thomas Stützle. *Towards Automatically Configured Multi-objective Optimizers*. Plenary talk given at the Evolutionary Multi-objective Conference (EMO 2015), Guimarães, Portugal, 2015.
- PT.15** Thomas Stützle. *Automated Algorithm Configuration: Recent Advances and Prospects*. Plenary talk given at the VIII ALIO/EURO Workshop on Applied Combinatorial Optimization, Montevideo, Uruguay, 2014.
- PT.14** Thomas Stützle. *Automated Algorithm Configuration: Advances and Prospects*. Plenary talk given at the 8th International Symposium on Intelligent Distributed Computing (IDC'2014), Madrid, Spain, 2014.
- PT.13** Thomas Stützle. *Automated Algorithm Configuration: Beyond Parameter Tuning*. Plenary talk given at the Workshop on Rough Sets: Theory & Applications at the Joint Rough Set Symposium, Granada, Spain, 2014.
- PT.12** Thomas Stützle. *Automated Algorithm Configuration: Beyond Parameter Tuning*. Plenary talk given at the EVOLVE 2014 conference, Beijing, China, 2014.
- PT.11** Thomas Stützle. *Towards Automated Algorithm Configuration*. Plenary talk given at the 2nd Brazilian Conference on Intelligent Systems (BRACIS-13), Fortaleza, Brazil, 2013.
- PT.10** Thomas Stützle. *Automated Algorithm Configuration: Methods, Applications and Prospects*. Plenary talk given at the 2013 IEEE Congress on Evolutionary Computation, Cancun, Mexico, 2013.

- PT.9** Thomas Stützle. *Automatic Algorithm Configuration of Parameterized Algorithms: Advances, Applications, and Prospects*. Plenary talk given at the Scientific day organized in honor of the 30th birthday of the Heudiasyc laboratory, Université de Technologie de Compiègne, Compiègne, France, December 2011.
- PT.8** Thomas Stützle. *Stochastic Local Search, Multi-objective Optimization, and Automated Configuration of Algorithms*. Plenary talk given at the 4th Basque Colloquium in Mathematics and its Applications, Basque Center for Applied Mathematics (BCAM), San Sebastian, Spain, February 2011.
- PT.7** Thomas Stützle. *Engineering Stochastic Local Search*. Plenary talk at the “Local Search in Constraint Programming” Workshop, Lisbon, Portugal, September 2009.
- PT.6** Thomas Stützle. *Engineering Stochastic Local Search Algorithms*. Plenary talk at the “EU/MEeting 2009, Debating the future: new areas of application and innovative approaches”, Porto, Portugal, May 2009.
- PT.5** Thomas Stützle. *Ant Colony Optimization: A Review*. Plenary talk at the “International Workshop on Nature Inspired Cooperative Strategies for Optimization”, Puerto de la Cruz, Spain, November 2008.
- PT.4** Thomas Stützle. *Engineering Stochastic Local Search Algorithms*. Plenary talk at the “Hybrid Metaheuristics Workshop”, Dortmund, Germany, 2007.
- PT.3** Thomas Stützle. *Stochastic Local Search: Recent Trends*. Plenary talk at the “II Congreso Mexicano de Computación Evolutiva”, Aguascalientes, Mexico, May 2005.
- PT.2** Thomas Stützle. *Ant Colony Optimization*. Plenary talk at the “Workshop on Local Search”, London, UK. April 2002.
- PT.1** Thomas Stützle. *Algoritmos Basados en Colonias de Hormigas*. Plenary talk at the “First Spanish Congress on Evolutionary and Bio-inspired Algorithms (AEB’02)”, Mérida, Spain. February 2002.

INVITED TALKS

- IT.40** Thomas Stützle. *Automated Algorithm Design: Automatically Generating High-performance Algorithms*. Talk given at the Department of Management Engineering, Technical University of Denmark (DTU), Denmark, May 9, 2017.
- IT.39** Thomas Stützle. *Automatically Generating High-performance Heuristics from Flexible Algorithm Frameworks*. Talk given at the Department of Management Engineering, Leiden University, The Netherlands, February 7, 2017.
- IT.38** Thomas Stützle. *Automatic Algorithm Configuration: Advances and Perspectives*. Talk given at the Delft Center for Systems and Control, Delft University of Technology, Netherlands, November 30, 2015.
- IT.38** Thomas Stützle. *Automatic Algorithm Configuration: Advances and Perspectives*. Talk given at the Delft Center for Systems and Control, Delft University of Technology, Netherlands, November 30, 2015.

- IT.37** Thomas Stützle. *Automated Algorithm Configuration: Advances and Perspectives*. Talk given at the Department of Economics, University of Magdeburg, Germany, July 2015.
- IT.36** Thomas Stützle. *Automated Algorithm Configuration: Beyond Parameter Tuning*. Talk given in the Seminar of the School of Computing, University of Kent, Canterbury, UK, January 2015.
- IT.35** Thomas Stützle. *Swarm Intelligence — “Historical” Development at the Example of Ant Colony Optimization*. Talk given at the Symposium “Ein halbes Jahrhundert Zickzack mit Darwin” held in honor of 50 years of evolution strategies, University of Jena, November 2014.
- IT.34** Thomas Stützle. *Swarm Intelligence, Ant Colony Optimization, and Automatic Configuration: An Overview*. Talk given at the State Key Laboratory of Complex System Simulation, Beijing Institute of System Engineering, Beijing, China, July 2014.
- IT.33** Thomas Stützle. *Automatic Configuration of Optimization Algorithms*. Talk given in the Research Seminar Series in Operations Management, Faculty of Business and Economics, Katholieke Universiteit Leuven, Leuven, Belgium, March 2012.
- IT.32** Thomas Stützle. *Automatic Configuration of Optimization Algorithms*. Talk given in the Mathematical Programming Seminar, CORE, Université catholique de Louvain, Louvain-La-Neuve, Belgium, January 2012.
- IT.31** Thomas Stützle. *Automatic Algorithm Configuration: Tools and Applications*. Talk given in the Artificial Intelligence and Natural Computation Series, Computer Science Department, University of Birmingham, United Kingdom, June 2011.
- IT.30** Thomas Stützle. *Automatic Algorithm Configuration: Tools and Applications*. Talk given at the Warwick Business School, University of Warwick, United Kingdom, June 2011.
- IT.29** Thomas Stützle. *Effective Stochastic Local Search Algorithms for Biobjective Permutation Flow-shop Problems*. Talk given at the Symposium “OR problems and AI techniques”, Kortrijk, Belgium, March 2011.
- IT.28** Thomas Stützle. *Research on Stochastic Local Search Algorithms at IRIDIA*. Talk given at the Computer Science Department, Université Libre de Bruxelles (ULB), Brussels, Belgium, May 2010.
- IT.27** Thomas Stützle. *Ant Colony Optimization: A Successful Stochastic Local Search Method*. Talk given at Center for Living Technology, Venice, Italy, November 2009.
- IT.26** Thomas Stützle. *Analysis and Design of Stochastic Local Search Algorithms for Multiobjective Optimization*. Talk given at the Journée de formation doctorale “Aide à la Décision multicritère. Modélisation des Préférences et Optimisation Multi-Objectifs”, Brussels, Belgium, October 2008.
- IT.25** Thomas Stützle. *Automated Tuning of Parameterized Algorithms*. Talk given at the Minisymposium on Evolutionary Algorithms, Max-Planck Institut für Informatik, Saarbrücken, Germany, June 2008.
- IT.24** Thomas Stützle. *Towards Engineering Stochastic Local Search Algorithms*. Talk given at the Minisymposium on Evolutionary Algorithms, Max-Planck Institut für Informatik, Saarbrücken, Germany, June 2008.
- IT.23** Thomas Stützle. *Engineering Stochastic Local Search Algorithms*. Talk given at the Department of Information Technology, Uppsala, Sweden, January 2008.

- IT.22** Thomas Stützle. *Ant Colony Optimization*. Talk given at the *Machine Learning Workshop*, Cambridge, England, June 2007.
- IT.21** Thomas Stützle. *Towards Engineering Stochastic Local Search Algorithms*. Talk given at the Information and Communication Technologies Department, Università degli Studi di Trento, April 2007.
- IT.20** Thomas Stützle. *Stochastic Local Search Algorithms: Advances and Recent Trends*. Talk given at the CoDE Department, Université Libre de Bruxelles, December 2006.
- IT.19** Thomas Stützle. *Experience with EU projects at IRIDIA*. Talk given at the FNRS–NCP Contact Day, November 2006.
- IT.18** Thomas Stützle. *Stochastic Local Search Algorithms: Techniques and Recent Trends*. Talk given at the Computer Science Department, Vrije Universiteit Brussel, March 2006.
- IT.17** Thomas Stützle. *Ant Colony Optimization: Eine Einführung*. Talk given at the Chemistry Department, University of Konstanz. 2. December 2005.
- IT.16** Thomas Stützle. *Ant Colony Optimization: Eine Einführung*. Talk given at the Institut für theoretische Physik, Universität Göttingen. 20. April 2005.
- IT.15** Thomas Stützle. *Stochastic Local Search Methods: Iterated Local Search and Recent Trends in SLS* Talk given at the Fakultät für Wirtschaftswissenschaften, University of Vienna. December 2004.
- IT.14** Thomas Stützle. *Stochastic Local Search: Applications and Foundations*. Talk given at the *Institut de Recherches Interdisciplinaires et de Développements en Intelligence Artificielle (IRIDIA)*, Université Libre de Bruxelles, Brüssel. 30. November 2004.
- IT.13** Thomas Stützle. *Empirical Analysis of Stochastic Local Search Algorithms with Run-time Distributions*. Computer Science Department, University of Erlangen–Nürnberg, June 2004.
- IT.12** Thomas Stützle. *Topics in Stochastic Local Search*. Informatikkolloquium, Computer Science Department, Darmstadt University of Technology, January 2004.
- IT.11** Thomas Stützle and Mauro Birratarì. *Optimal Configuration of Algorithms by Experimental Design?* Talk given at the Statistics Seminar, Department of Statistics, University of Dortmund. October 2001.
- IT.10** Thomas Stützle. *Iterated Local Search*. Invited talk at the Institute of Applied Informatics and Formal Description Methods, University of Karlsruhe, Germany. October 26, 2001.
- IT.9** Thomas Stützle. *Ant Colony Optimization for Combinatorial Optimization*. Invited talk at the Interdisziplinärer Arbeitskreis (IAK) of the University of Mainz, Germany. June 26, 2001.
- IT.8** Thomas Stützle. *Iterated Local Search*. Invited talk at the Department of Computer Science and Artificial Intelligence, University of Granada, Spain. May 2001.
- IT.7** Thomas Stützle. *MAX–MIN Ant System — An effective Ant Colony Optimization Algorithm for Combinatorial Optimization Problems*. Invited talk at the Department of Computer Science and Artificial Intelligence, University of Granada, Spain. May 2001.
- IT.6** Thomas Stützle. *Eine Einführung in die Optimierung mit Ameisenalgorithmen*. Invited talk at the Mainzer KI-Kreis, Universität Mainz, Mainz, Germany. November 14, 2000.

- IT.5** Thomas Stützle. *Ant Colony Optimization Approaches for Combinatorial Optimization Problems*. Invited talk at the Departament d'Economia i Empresa, Universitat Pompeu Fabra, Barcelona, Spain, November 2, 1999.
- IT.4** Thomas Stützle. *Iterated Local Search and Evolution Strategies for the Quadratic Assignment Problem*. Invited talk at the 16th European Conference on Operational Research, Brussels, July 1998.
- IT.3** Thomas Stützle. *An Ant Colony Optimization Approach to the Quadratic Assignment Problem*. Invited talk at the INFORMS-98 Meeting, Tel Aviv, Israel, June 1998.
- IT.2** Thomas Stützle. *Ameisenalgorithmen für kombinatorische Optimierungsprobleme*. Invited talk at the Faculty of Economic Sciences, University of Karlsruhe. June 1997.
- IT.1** Thomas Stützle. *Combinatorial Optimisation with $MAX-MIN$ Ant System*. Invited talk of the IEEE Kharagpur Section, Indian Institute of Technology, Kharagpur (Distinguished Lecturer). February 1997.