

FOGA 2025 Program

	27th August	28th August	29th August
08:30	Registration		
09:00	Welcome	Registration	
09:30 10:00	Joshua Knowles (09:30-10:30)	Vedran Dunjko (09:30-10:30)	Tobias Glasmachers (09:30-10:30)
10:30	Coffee break	Coffee break	Coffee break
11:00 11:30 12:00	Poster session 1 (11:00-12:30)	Poster session 4 (11:00-12:30)	Discussion: Evolution of FOGA (11:00-12:00) Conference closing
12:30 13:00	Lunch	Lunch	
13:30 14:00 14:30	Poster session 2 (13:30-15:00)	Poster session 5 (13:30-15:00)	
15:00	Coffee break	Coffee break	
15:30 16:00 16:30	Poster session 3 (15:30-17:00)	Poster session 6 (15:30-17:00)	
17:00 17:30 18:00 18:30	Welcome reception (17:00-19:00)	Travel to dinner	
19:00 19:30 20:00 20:30 21:00 21:30 22:00 22:30		Dinner (19:00-23:00)	

Details

Venue Gorlaeus building (Einsteinweg 55, 2333 CC Leiden), Rooms **BE.0.18** for the poster sessions and **BE.0.17** for everything else

Coffee Foyer on the ground floor of Gorlaeus (turn right before the building reception)

Lunch Brasserie Science on the ground floor of Gorlaeus (turn right before the building reception). Lunch is at the expense of the participants. Debit or credit card payments only.

Reception Drinks and snacks will be offered at the De Fusie bar on the ground floor of Gorlaeus (turn left after the building reception and open staircase)

Dinner travel Attendees will need to take public transport to the dinner venue (about 20 mins bus ride, debit or credit card payments only). Details to be announced soon

Dinner Dinner is included in the registration fee. Details to be announced soon

FOGA 2025 Poster Sessions, August 27

Poster session 1, 11:00-12:30

- **Analyzing Competitive Coevolution across Families of N-Player Games through Tree Search**
Sean N. Harris (Auburn University, BONSAI Lab), Daniel R. Tauritz (Auburn University, BONSAI Lab), Samuel Mulder (Auburn University, BONSAI Lab)
- **Efficient Online Automated Algorithm Selection in the Face of Data-Drift in Optimisation Problem Instances**
Jeroen Rook (Paderborn University, University of Twente), Quentin Renau (Edinburgh Napier University), Heike Trautmann (Paderborn University, University of Twente), Emma Hart (Edinburgh Napier University)
- **Empirical Linkage Discovery in Bi-Objective Optimization**
Michał Witold Przewoźniczek (Wrocław University of Science and Technology), Marcin Michał Komarnicki (Wrocław University of Science and Technology), Renato Tinós (University of São Paulo)
- **Population Dynamics and Improved Runtime Guarantees for the $(\mu + 1)$ EA on BinVal**
Martin S. Krejca (Ecole Polytechnique, Institut Polytechnique de Paris), Frank Neumann (University of Adelaide), Carsten Witt (Technical University of Denmark)
- **Surrogate Model Assisted Evolutionary Algorithms: Performance Bound and Incremental Gaussian Process Model Updates**
Hong Huang (Dalhousie University), Dirk V. Arnold (Dalhousie University)

Poster session 2, 13:30-15:00

- **A Fixed-Parameter Tractable GA for Data Clustering**
Liam Gaeuman (University of Minnesota Duluth), Andrew M. Sutton (University of Minnesota Duluth)
- **On the Problem Characteristics of Multi-objective Pseudo Boolean Functions in Runtime Analysis**
Zimin Liang (University of Birmingham), Miqing Li (University of Birmingham)
- **Optimal Restart Strategies for Parameter-dependent Optimization Algorithms**
Lisa Schönenberger (Ulm University, Vorarlberg University of Applied Sciences), Hans-Georg Beyer (Vorarlberg University of Applied Sciences)
- **Trust Region-Based Bayesian Optimisation to Discover Diverse Solutions**
Kokila Kasuni Perera (Optimisation and Logistics, School of Computer and Mathematical Sciences, The University of Adelaide), Frank Neumann (Optimisation and Logistics, School of Computer and Mathematical Sciences, The University of Adelaide), Aneta Neumann (Optimisation and Logistics, School of Computer and Mathematical Sciences, The University of Adelaide)

Poster session 3, 15:30-17:00

- **A First Runtime Analysis of the PAES-25: An Enhanced Variant of the Pareto Archived Evolution Strategy**
Andre Opris (University of Passau)
- **A Standardized Benchmark Set of Clustering Problem Instances for Comparing Black-Box Optimizers**
Diederick Vermetten (LIP6, Sorbonne University; CNRS), Catalin-Viorel Dinu (LIP6, Sorbonne University; CNRS), Marcus Gallagher (Queensland University)
- **Conditional Direct Empirical Linkage Discovery for Solving Multi-Structured Problems**
Michał Witold Przewoźniczek (Wrocław University of Science and Technology), Peter Alexander Nicolaas Bosman (Centrum Wiskunde & Informatica), Anton Bouter (Centrum Wiskunde & Informatica), Arthur Guijt (Centrum Wiskunde & Informatica), Marcin Michał Komarnicki (Wrocław University of Science and Technology), Dirk Thierens (Utrecht University)
- **Distributed Evolutionary Algorithms with Adversarial Corruption**
Brahim Aboutaib (University of Minnesota Duluth), Andrew M. Sutton (University of Minnesota Duluth)

FOGA 2025 Poster Sessions, August 28

Poster session 4, 11:00-12:30

- **Additive Drift as an Optimization Problem for the (1+1)-ES**
Alexander Jungeilges (Ruhr-University Bochum), Tobias Glasmachers (Ruhr-University Bochum)
- **Availability of Perfect Decomposition in Statistical Linkage Learning for Unitation-Based Function Concatenations**
Michał Prusik (Wrocław University of Science and Technology), Bartosz Frej (Wrocław University of Science And Technology), Michał Przewozniczek (Wrocław University of Science and Technology)
- **Hyper-GRASP: A Hypervolume-Based Constructive Heuristic**
Gonçalo Lopes (University of Coimbra, CISUC/LASI, DEI), Luís Paquete (University of Coimbra, CISUC/LASI, DEI), Carlos Fonseca (University of Coimbra, CISUC/LASI, DEI)
- **Multi-parameter Control for the $(1+(\lambda, \lambda))$ -GA on OneMax via Deep Reinforcement Learning**
Tai Nguyen (University of St Andrews, Sorbonne University), Phong Le (University of St Andrews), Carola Doerr (CNRS, Sorbonne University), Nguyen Dang (University of St Andrews)
- **Runtime Bounds for a Coevolutionary Algorithm on Classes of Potential Games**
Mario Alejandro Hevia Fajardo (University of Birmingham), Jamal Toutouh (University of Malaga), Erik Hemberg (Massachusetts Institute of Technology), Una-May O'Reilly (Massachusetts Institute of Technology), Per Kristian Lehre (University of Birmingham)

Poster session 5, 13:30-15:00

- **Clearing the Combinatorial Fog: Tracing the Hidden Paths of TSP Heuristics**
Jonathan Heins (TU Dresden), Sebastian Dengel (TU Dresden), Darrell Whitley (Colorado State University), Pascal Kerschke (TU Dresden, ScaDS.AI Dresden/Leipzig)
- **Generating Realistic Benchmarks for Dynamic Truck and Trailer Scheduling using Gaussian Copulas**
Joan Alza (Robert Gordon University, National Subsea Centre), Mark Bartlett (Robert Gordon University), Josu Ceberio (University of the Basque Country), John McCall (Robert Gordon University)
- **Runtime Analysis of a Compact Genetic Algorithm with High Selection Pressure**
Sumit Adak (Technical University of Denmark), Carsten Witt (Technical University of Denmark)
- **Scalable Multi-Modal Multi-Objective Test Problems with Respect to Decision Space Dimensionality and Pareto Set Dimensionality: High-Dimensional Manhattan Distance Minimization Problems**
Hisao Ishibuchi (Southern University of Science and Technology), Tianye Shu (Southern University of Science and Technology), Lie Meng Pang (Southern University of Science and Technology)

Poster session 6, 15:30-17:00

- **Diversity-Preserving Exploitation of Crossover**
Johannes Lengler (ETH Zurich), Tom Offermann (ETH Zurich)
- **Enhancing Parameter Control Policies with State Information**
Denis Antipov (Sorbonne Université, CNRS, LIP6), Gianluca Covini (University of Pavia), Carola Doerr (Sorbonne Université, CNRS, LIP6)
- **Foundations of Correlated Mutations for Integer Programming**
Ofer Shir (Tel-Hai College, Migal Institute), Michael Emmerich (University of Jyväskylä)
- **Optimal Distributions of Solutions for Maximizing the Minimum Crowding Distance for Two-Objective and Three-Objective Linear Pareto Fronts: Search Behavior Analysis of NSGA-II**
Hisao Ishibuchi (Southern University of Science and Technology), Yang Nan (Southern University of Science and Technology), Lie Meng Pang (Southern University of Science and Technology)