

# EVOSTAR2024: EVOSTAR

PROGRAM AUTHORS KEYWORDS

## PROGRAM

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Days: [Wednesday, April 3rd](#) [Thursday, April 4th](#) [Friday, April 5th](#)

Wednesday, April 3rd

View this program: [with abstracts](#) [session overview](#) [talk overview](#)

**09:15-09:40** Session 1: Conference opening

CHAIR: [F. Penousal Machado](#)

LOCATION: [Room A](#)

**09:40-10:40** Session 2: Plenary invited talk: Jon Timmis

CHAIR: [Christine Zarges](#)

LOCATION: [Room A](#)

**11:00-13:35** Session 3A: EvoMUSART 1 - Computational Intelligence for Audio-visual Creativity

CHAIR: [Colin Johnson](#)

LOCATION: [Room A](#)

11:00 [Colin Roitt](#), [Simon Hickinbotham](#) and [Andy Tyrrell](#)

**Enough is Enough: Learning to Stop in Generative Systems**  
([abstract](#))

11:25 [Francesco Maccarini](#), [Mael Oudin](#), [Mathieu Giraud](#) and [Florence Levé](#)

**Co-creative orchestration of Angeles with layer scores and orchestration plans** ([abstract](#))

11:50 [Elia Pacioni](#) and [Francisco Fernández de Vega](#)

**On the impact of directed mutation applied to Evolutionary 4-part harmony models** ([abstract](#))

12:15 [Björn Þór Jónsson](#), [Çağrı Erdem](#), [Stefano Fasciani](#) and [Kyrre Glette](#)

**Towards Sound Innovation Engines Using Pattern-Producing Networks and Audio Graphs** ([abstract](#))

12:40 [Shaurya Gaur](#) and [Patrick J. Donnelly](#)

**Generating Smooth Mood-Dynamic Playlists with Audio Features and KNN** ([abstract](#))

13:05 [Pablo Gervás](#) and [Gonzalo Mendez](#)

**Pruning Worlds into Stories: Affective Interactions as Fitness Function** ([abstract](#))

**11:00-13:35** Session 3B: EML 1 - Computational Models and Short Talks

CHAIR: [Mengjie Zhang](#)

LOCATION: [Room B](#)

11:00 [Gabriel Cortés](#), [Nuno Lourenço](#) and [Penousal Machado](#)

**Towards Physical Plausibility in Neuroevolution Systems**  
([abstract](#))

11:25 [Corentin Léger](#), [Gautier Hamon](#), [Eleni Nisioti](#), [Xavier Hinaut](#) and [Clément Moulin-Frier](#)

**Evolving Reservoirs for Meta Reinforcement Learning** ([abstract](#))

11:50 [Bruno Gašperov](#), [Marko Đurasević](#) and [Domagoj Jakobovic](#)

**Leveraging More of Biology in Evolutionary Reinforcement Learning** ([abstract](#))

PRESENTER: [Bruno Gašperov](#)

12:15 [Zakaria Abdelmoiz Dahj](#), [Francisco Chicano](#) and [Gabriel Jesús Luque Polo](#)

**An Evolutionary Deep Learning Approach for Efficient Quantum Algorithms Transpilation** ([abstract](#))

12:25 [Luana Clare](#), [Alexandra Marques](#) and [João Correia](#)

**A Comparative Analysis of Evolutionary Adversarial One-Pixel Attacks** ([abstract](#))

12:35 [David Pätzel](#), [Richard Nordsieck](#) and [Jörg Hähner](#)

**Measuring Similarities in Model Structure of Metaheuristic Rule Set Learners** ([abstract](#))

- 12:45 [Jill Baumann](#) and [Oliver Kramer](#)  
**Evolutionary Multi-Objective Optimization of Large Language Model Prompts for Balancing Sentiments** ([abstract](#))  
 PRESENTER: [Jill Baumann](#)
- 12:55 [Harsh Bandhey](#), [Sphia Sadek](#), [Malek Kamoun](#) and [Ryan Urbanowicz](#)  
**Evolutionary Feature-Binning with Adaptive Burden Thresholding for Biomedical Risk Stratification** ([abstract](#))
- 13:05 [Muhammad Junaid Ali](#), [Laurent Moalic](#), [Mokhtar Essaid](#) and [Lhasssane Idoumghar](#)  
**Robust Neural Architecture Search using Differential Evolution for Medical Images** ([abstract](#))  
 PRESENTER: [Muhammad Junaid Ali](#)

**11:00-13:35** Session 3C: EvoApplications 1 - Image Analysis, Signal Processing and Pattern Recognition

CHAIRS: [Stephen Smith](#), [João Correia](#) and [Marta Vallejo](#)

LOCATION: [Room C](#)

- 11:00 [Tiziana D'Alessandro](#), [Claudio De Stefano](#), [Francesco Fontanella](#) and [Emanuele Nardone](#)  
**Integrating Data Augmentation in Evolutionary Algorithms for Feature Selection: A Preliminary Study** ([abstract](#))  
 PRESENTER: [Emanuele Nardone](#)
- 11:25 [Michail Antisthenis Tsompanas](#)  
**Incremental growth on CPPN based optimization of biohybrid actuators.** ([abstract](#))
- 11:50 [Romain Michelucci](#), [Vincent Callegari](#), [Jean-Paul Comet](#) and [Denis Pallez](#)  
**Cellular Genetic Algorithms for identifying variables in hybrid Gene Regulatory Networks** ([abstract](#))  
 PRESENTER: [Romain Michelucci](#)
- 12:15 [Neil Urquhart](#) and [Kelly Hunter](#)  
**Evolving Staff Training Schedules using an Extensible Fitness Function and a Domain Specific Language.** ([abstract](#))
- 12:25 [Tinkle Chugh](#) and [Alexander Evans](#)  
**Integrating Bayesian and Evolutionary Multi-objective Optimisation** ([abstract](#))
- 12:35 [Kirsty Montague](#), [Emma Hart](#) and [Ben Paechter](#)  
**A Hierarchical Approach to Evolving Behaviour-Trees for Swarm Control** ([abstract](#))
- 12:45 [Jens Weise](#) and [Sanaz Mostaghim](#)  
**Finding sets of solutions for temporal uncertain problems** ([abstract](#))
- 12:55 [Gustavo Delazeri](#) and [Marcus Ritt](#)  
**Iterated Beam Search for Wildland Fire Suppression** ([abstract](#))

**11:00-13:35** Session 3D: Late-Breaking Abstracts

CHAIR: [Antonio Mora](#)

LOCATION: [Room D](#)

- 11:00 [Jesse Kommandeur](#) and [Daan van den Berg](#)  
**Two fast but unsuccessful algorithms for generating randomly folded proteins in HP** ([abstract](#))
- 11:10 [Jonathan Koutstaal](#), [Jesse Kommandeur](#), [Rik Timmer](#), [Ruben Horn](#), [Sarah Thomson](#) and [Daan van den Berg](#)  
**Frequency Fitness Assignment for Untangling Proteins in 2D** ([abstract](#))
- 11:20 [Francesca Schiavello](#) and [Edoardo Altamura](#)  
**The Max-Cut's Problem Solved with a Hybrid Evolutionary-QAOA Method** ([abstract](#))
- 11:30 [Scipio Akova](#), [Sarah L. Thomson](#), [Sébastien Verel](#), [Omar Rifki](#) and [Daan van den Berg](#)  
**Shape of the Waterfall: Solvability Transitions in the QAP** ([abstract](#))
- 11:40 [José María Alonso-Calero](#) and [Francisco Chicano](#)  
**Migrolanding, the distribution of migrants as a solution to a reverse colonization problem** ([abstract](#))

- 11:50 [Michal Pluhacek](#), [Jozef Kovac](#), [Peter Janku](#), [Tomas Kadavy](#), [Roman Senkerik](#) and [Adam Viktorin](#)  
**Using large language models for iterative enhancement of metaheuristics: a viable path forward?** ([abstract](#))
- 12:00 [Jj Merelo](#), [Antonio Mora](#) and [Mario Garcia Valdez](#)  
**Best practices for energy-thrifty evolutionary algorithms in the low-level language zig** ([abstract](#))
- 12:10 [Giulia Magnani](#), [Monica Mordonini](#) and [Stefano Cagnoni](#)  
**GP2SO: modeling and embedding 1-D signals using parametric symbolic regression** ([abstract](#))
- 12:20 [Yadira Sanchez Benitez](#)  
**Symbiotic Connectivity: Optimizing Rural Digital Infrastructure with Solar-Powered Mesh Networks Using Multi-Objective Evolutionary Algorithms** ([abstract](#))
- 12:30 [Jéssica Parente](#), [Francisco Baeta](#), [Tiago Martins](#), [João Bicker](#) and [Penousal Machado](#)  
**The Evolution of Legibility: Exploring Type Design with an Evolutionary Generative Adversarial Model** ([abstract](#))
- 12:40 [Antonio Mora](#) and [Samuel Fuentes-Izquiaino](#)  
**Combining Genetic Algorithms and Ant Colony Optimization for the Effective Allocation of Virtual Network Functions in a 5G Network** ([abstract](#))

**14:15-16:05** Session 4A: EuroGP Best Paper Nominations

CHAIR: [Mario Giacobini](#)

LOCATION: [Room A](#)

- 14:15 [Jessica Mégane](#), [Eric Medvet](#), [Nuno Lourenço](#) and [Penousal Machado](#)  
**Grammar-based Evolution of Polyominoes** ([abstract](#))
- 14:40 [Giorgia Nadizar](#), [Eric Medvet](#) and [Dennis G. Wilson](#)  
**Naturally Interpretable Control Policies via Graph-based Genetic Programming** ([abstract](#))
- 15:05 [Alican Mertan](#) and [Nick Cheney](#)  
**Investigating Premature Convergence in Co-optimization of Morphology and Control in Evolved Virtual Soft Robots** ([abstract](#))
- 15:30 [W B Langdon](#)  
**Genetic Improvement of Last Level Cache** ([abstract](#))
- 15:40 [Alina Geiger](#), [Dominik Sobania](#) and [Franz Rothlauf](#)  
**A Comprehensive Comparison of Lexicase-Based Selection Methods for Symbolic Regression Problems** ([abstract](#))

**14:15-16:05** Session 4B: EvoMUSART 2 - Short Presentations

CHAIR: [Sérgio Rebelo](#)

LOCATION: [Room B](#)

- 14:15 [Craig Vear](#), [Fabrizio Poltronieri](#), [Balandino Di Donato](#), [Yawen Zhang](#), [Johann Benerradi](#), [Simon Hutchinson](#), [Paul Turowski](#), [Jethro Shell](#) and [Hossein Malekmohamadi](#)  
**Building an Embodied Musicking Dataset for co-creative music-making** ([abstract](#))
- 14:25 [Justin Dettmer](#), [Igor Vatolkin](#) and [Tobias Glasmachers](#)  
**Weighted Initialisation of Evolutionary Instrument and Pitch Detection in Polyphonic Music** ([abstract](#))
- 14:35 [Leonard Fricke](#), [Mark Gotham](#), [Fabian Ostermann](#) and [Igor Vatolkin](#)  
**Adaptation and Optimization of AugmentedNet for Roman Numeral Analysis Applied to Audio Signals** ([abstract](#))
- 14:45 [Keshav Bhandari](#) and [Simon Colton](#)  
**Motifs, Phrases, and Beyond: The Modelling of Structure in Symbolic Music Generation** ([abstract](#))
- 14:55 [Xuneng Shi](#) and [Craig Vear](#)  
**Generating emotional music based on improved C-RNN-GAN** ([abstract](#))
- 15:05 [Edward Easton](#), [Aniko Ekart](#) and [Ulysses Bernardet](#)  
**Modelling individual aesthetic preferences of 3D sculptures** ([abstract](#))
- 15:15 [Suet Lee](#), [Mickey Li](#), [Razanne Abu-Aisheh](#), [Sabine Hauert](#), [Henry Hickson](#), [Tom Didiot-Cook](#), [Avgi Stavrou](#), [Khulud Alharthi](#) and [Georgios Tzoumas](#)

**The Forest: Towards Emergent Collaborative Art through Human Swarming** ([abstract](#))

15:25 [João Macedo](#), [Habtom Kahsay Gidey](#), [Karina Brotto Rebuli](#) and [Penousal Machado](#)

**Evolving User Interfaces: A Neuroevolution Approach for Natural Human-Machine Interaction** ([abstract](#))

**14:15-16:05** Session 4C: EvoApplications 2 - Problem Landscape Analysis & Other Applications

CHAIR: [Bogdan Filipič](#)

LOCATION: [Room C](#)

14:15 [Johannes J. Pienaar](#), [Anna S. Bosman](#) and [Katherine M. Malan](#)

**Hilbert curves for efficient exploratory landscape analysis neighbourhood sampling** ([abstract](#))

14:40 [Andrejaana Andova](#), [Jordan Cork](#), [Aljoša Vodopija](#), [Tea Tušar](#) and [Bogdan Filipič](#)

**Predicting Algorithm Performance in Constrained Multiobjective Optimization: A Tough Nut to Crack** ([abstract](#))

15:05 [Pavel Krömer](#), [Vojtech Uher](#), [Tea Tušar](#) and [Bogdan Filipič](#)

**On the Latent Structure of the bbob-biobj Test Suite** ([abstract](#))

15:30 [Seyed Jaleddin Mousavirad](#), [Diego Oliva](#), [Gerald Schaefer](#), [Mahshid Helali Moghadam](#) and [Mohammed El-Abd](#)

**A Novel Two-Level Clustering-Based Differential Evolution Algorithm for Training Neural Networks** ([abstract](#))

15:55 [Claude Carlet](#), [Marko Đurasević](#), [Bruno Gašperov](#), [Domagoj Jakobovic](#), [Luca Mariot](#) and [Stjepan Picek](#)

**A New Angle: On Evolving Rotation Symmetric Boolean Functions** ([abstract](#))

**16:25-17:45** Session 5A: EvoMUSART Best Paper Nominations

CHAIRS: [Sérgio Rebelo](#) and [Colin Johnson](#)

LOCATION: [Room A](#)

16:25 [Ole Hall](#) and [Anil Yaman](#)

**Collaborative Interactive Evolution of Art in the Latent Space of Deep Generative Models** ([abstract](#))

16:50 [Wenqian Cui](#), [Pedro Sarmiento](#) and [Mathieu Barthez](#)

**MoodLoopGP: Generating Emotion-Conditioned Loop Tablature Music with Multi-Granular Features** ([abstract](#))

17:15 [Luca Casini](#), [Nicolas Jonason](#) and [Bob Sturm](#)

**Investigating the viability of Masked Language Modeling for symbolic music generation in abc-notation** ([abstract](#))

**16:25-17:45** Session 5B: Poster preparation

LOCATION: [Room B](#)

**16:25-17:45** Session 5C: EvoApplications 3 - Games

CHAIRS: [Stephen Smith](#) and [Alberto Tonda](#)

LOCATION: [Room C](#)

16:25 [Marshall Joseph](#) and [Brian Ross](#)

**Using Evolution and Deep Learning to Generate Diverse Intelligent Agents** ([abstract](#))

16:50 [Tyler Cowan](#) and [Brian Ross](#)

**Strategies for Evolving Diverse and Effective Behaviours in Pursuit Domains** ([abstract](#))

17:00 [Amani Sagri](#), [Tristan Cazenave](#), [Jérôme Arjonilla](#) and [Abdallah Saffidine](#)

**Vision Transformers for Computer Go** ([abstract](#))

17:10 [Vincenzo Gulisano](#) and [Eric Medvet](#)

**Evolutionary Computation meets Stream Processing** ([abstract](#))

17:35 [Zhilei Zhou](#), [Nur Zincir-Heywood](#) and [Malcolm Heywood](#)

**Simple Efficient Evolutionary Ensemble Learning on Network Intrusion Detection Benchmarks** ([abstract](#))

**16:25-17:45** Session 5D: EuroGP 1

CHAIR: [Bing Xue](#)

16:25 [Leonardo Vanneschi](#)

**SLIM\_GSGP: The Non-Bloating Geometric Semantic Genetic**

**Programming** ([abstract](#))

16:50 [Allan de Lima](#), [Samuel Carvalho](#), [Douglas Mota Dias](#), [Jorge Luis Machado Do Amaral](#), [Joseph P. Sullivan](#) and [Conor Ryan](#)

**Fuzzy Pattern Trees for Classification Problems Using Genetic Programming** ([abstract](#))

PRESENTER: [Allan de Lima](#)

17:15 [Claude Carlet](#), [Marko Đurasević](#), [Domagoj Jakobovic](#), [Luca Mariot](#) and [Stjepan Picek](#)

**Look into the Mirror: Evolving Self-Dual Bent Boolean Functions** ([abstract](#))

17:25 [Rémi Felin](#), [Pierre Monnin](#), [Catherine Faron](#) and [Andrea Tettamanzi](#)

**An Algorithm Based on Grammatical Evolution for Discovering SHACL Constraints** ([abstract](#))

**18:00-20:00** Session 6: Poster session

LOCATION: [MedRus](#)

Thursday, April 4th

View this program: [with abstracts](#) [session overview](#) [talk overview](#)

**09:00-11:00** Session 7A: EvoCOP 1 - Operators, learning, and applications

CHAIR: [Gabriela Ochoa](#)

LOCATION: [Room A](#)

09:00 [Nguyen Dang Viet Anh](#), [Aldy Gunawan](#), [Mustafa Misir](#) and [Pieter Vansteenwegen](#)

**Q-learning Based Framework for Solving the Stochastic E-waste Collection Problem** ([abstract](#))

09:25 [Simon Anderer](#), [Bernd Scheuermann](#) and [Sanaz Mostaghim](#)

**Studies on Multi-objective Role Mining in ERP Systems** ([abstract](#))

09:50 [Satya Tamby](#), [Laurent Gourves](#) and [Stefano Moretti](#)

**Greedy heuristic guided by lexicographic excellence** ([abstract](#))

10:15 [Olivier Goudet](#), [Mohamed Salim Amri Sakhri](#), [Adrien Goëffon](#) and [Frédéric Saubion](#)

**Emergence of new local search algorithms with neuro-evolution** ([abstract](#))

**09:00-11:00** Session 7B: EvoApplications 4 - Computational Intelligence for Sustainability

CHAIR: [Jamal Toutouh El Alamin](#)

LOCATION: [Room B](#)

09:00 [Diego Daniel Pedroza-Perez](#), [Jamal Toutouh](#) and [Gabriel Luque](#)

**Optimizing Urban Infrastructure for E-Scooter Mobility** ([abstract](#))

09:25 [Julien Biau](#), [Sylvain Cussat-Blanc](#) and [Hervé Luga](#)

**Improving Image Filter Efficiency: A Multi-Objective Genetic Algorithm Approach to Optimize Computing Power** ([abstract](#))

09:50 [Luke de Jeu](#) and [Anil Yaman](#)

**Heuristics for Evolutionary Optimization for the Centered Bin Packing Problem** ([abstract](#))

10:15 [Carlos Cotta](#) and [Jose Gallardo](#)

**Evolutionary Algorithms for Optimizing Emergency Exit Placement in Indoor Environments** ([abstract](#))

10:40 [Ashish Lakhmani](#), [Ruppa Thulasiram](#) and [Parimala Thulasiraman](#)

**Nature-inspired Portfolio Diversification using Ant Brood Clustering** ([abstract](#))

PRESENTER: [Ashish Lakhmani](#)

**09:00-11:00** Session 7C: EvoApplications 5 - Misc applications

CHAIRS: [Stephen Smith](#) and [João Correia](#)

LOCATION: [Room C](#)

09:00 [Bruno Gašperov](#), [Marko Đurasević](#) and [Domagoj Jakobović](#)

**Finding Near-Optimal Portfolios With Quality-Diversity** ([abstract](#))

PRESENTER: [Bruno Gašperov](#)

09:25 [Riccardo Lunelli](#) and [Giovanni Iacca](#)

**Low-Memory Matrix Adaptation Evolution Strategies exploiting gradient information and Lévy flight** ([abstract](#))

- 09:50 [Sarah Degaugue](#), [Nicolas Durand](#) and [Jean-Baptiste Gotteland](#)  
**Memory Based Evolutionary Algorithm for Dynamic Aircraft Conflict Resolution** ([abstract](#))  
PRESENTER: [Sarah Degaugue](#)
- 10:15 [Davide Farinati](#) and [Leonardo Vanneschi](#)  
**GM4OS: an Evolutionary Oversampling Approach for Imbalanced Binary Classification Tasks** ([abstract](#))
- 10:40 [Ashley Mann](#), [Mahir Arzoky](#) and [Stephen Swift](#)  
**Applying Graph Partitioning-Based Seeding Strategies to Software modularisation** ([abstract](#))

**11:20-12:20** Session 8: Julian F. Miller Award Session: A coffee with Hod Lipson and Dario Floreano

CHAIR: [F. Penousal Machado](#)

LOCATION: [Room A](#)

**12:20-13:20** Session 9: Student workshop

CHAIRS: [Giorgia Nadizar](#) and [Jessica Mégane](#)

LOCATION: [Room B](#)

**14:20-16:00** Session 10A: EvoApplications Best Paper nominations

CHAIRS: [Stephen Smith](#) and [João Correia](#)

LOCATION: [Room A](#)

- 14:20 [Taran Cyriac John](#), [Qurrat Ul Ain](#), [Harith Al-Sahaf](#) and [Mengjie Zhang](#)  
**Evolving Feature Extraction Models for Melanoma Detection: A Co-operative Co-evolution Approach** ([abstract](#))
- 14:45 [Yumnah Hasan](#), [Allan de Lima](#), [Fatemeh Amerehi](#), [Darian Reyes Fernandez de Bulnes](#), [Patrick Healy](#) and [Conor Ryan](#)  
**Interpretable Solutions for Breast Cancer Diagnosis with Grammatical Evolution and Data Augmentation** ([abstract](#))  
PRESENTER: [Yumnah Hasan](#)
- 15:10 [Conor Spann](#), [Evelyne Lutton](#), [Francois Boue](#) and [Franck Vidal](#)  
**3D Motion Analysis in MRI using a Multi-objective Evolutionary k-means Clustering** ([abstract](#))

**14:20-16:00** Session 10B: EvoMUSART 4 - Generative Visual Design and Illustration

CHAIR: [Iria Santos](#)

LOCATION: [Room B](#)

- 14:20 [João Macedo](#), [Daniel Lopes](#), [João Correia](#), [Penousal Machado](#) and [Ernesto Costa](#)  
**Evolving Visually-Diverse Graphic Design Posters** ([abstract](#))
- 14:45 [Sérgio M. Rebelo](#), [J. J. Merelo](#), [João Bicker](#) and [Penousal Machado](#)  
**Evaluation Metrics for Automated Typographic Poster Generation** ([abstract](#))
- 15:10 [João Eduardo Batista](#), [Fraser Garrow](#), [Carlo Huesca Spairani](#) and [Tiago Martins](#)  
**Evoboard: Geoboard-inspired Evolved Typefonts** ([abstract](#))  
PRESENTER: [João Eduardo Batista](#)
- 15:35 [Sabine Wieluch](#) and [Friedhelm Schwenker](#)  
**PatternPortrait: Draw Me Like One of Your Scribbles** ([abstract](#))

**14:20-16:00** Session 10C: EuroGP 2

CHAIR: [Leonardo Vanneschi](#)

LOCATION: [Room C](#)

- 14:20 [Thomas Helmuth](#), [Edward Pantridge](#), [James Frazier](#) and [Lee Spector](#)  
**Reducing Generational Computation in Counterexample-Driven Genetic Programming without Formal Specifications** ([abstract](#))
- 14:45 [Giovanni Pinna](#), [Damiano Ravalico](#), [Luigi Rovito](#), [Luca Manzoni](#) and [Andrea De Lorenzo](#)  
**Enhancing Large Language Models-based Code Generation by Leveraging Genetic Improvement** ([abstract](#))
- 15:10 [Andrew Ni](#), [Li Ding](#) and [Lee Spector](#)  
**DALex: Lexicase-like Selection via Diverse Aggregation** ([abstract](#))

**16:20-18:00** Session 11A: EvoCOP Best Paper nominations

CHAIR: [Thomas Stützle](#)

LOCATION: [Room A](#)

- 16:20 [Marc Kaufmann](#), [Maxime Larcher](#), [Johannes Lengler](#) and [Oliver Sieberling](#)  
**Hardest Monotone Functions for Evolutionary Algorithms**  
[\(abstract\)](#)
- 16:45 [Jaume Reixach](#), [Christian Blum](#), [Marko Djukanovic](#) and [Günther R. Raidl](#)  
**A Neural Network Based Guidance for a BRKGA: An Application to the Longest Common Square Subsequence Problem** [\(abstract\)](#)  
 PRESENTER: [Jaume Reixach](#)
- 17:10 [Valentin Vendi](#), [Sébastien Verel](#) and [Cyril Fonlupt](#)  
**Sparse Surrogate Model for Optimization: Example of the Bus Stops Spacing Problem** [\(abstract\)](#)

**16:20-18:00** Session 11B: EML 2 - EC for EML enhancement

CHAIR: [Nuno Lourenço](#)

LOCATION: [Room B](#)

- 16:20 [Didrik Spanne Reilstad](#) and [Kai Olav Ellefsen](#)  
**Cultivating Diversity: A Comparison of Diversity Objectives in Neuroevolution** [\(abstract\)](#)  
 PRESENTER: [Didrik Spanne Reilstad](#)
- 16:45 [Angus Kenny](#), [Tapabrata Ray](#), [Steffen Limmer](#), [Hemant Singh](#), [Tobias Rodemann](#) and [Markus Olhofer](#)  
**A Hierarchical Dissimilarity Metric for Automated Machine Learning Pipelines, and Visualizing Search Behaviour** [\(abstract\)](#)
- 17:10 [Emilio Bernal-Zubieta](#), [Jesús Guillermo Falcón-Cardona](#) and [Jorge M. Cruz-Duarte](#)  
**DeepEMO: A Multi-Indicator Convolutional Neural Network-based Evolutionary Multi-Objective Algorithm** [\(abstract\)](#)
- 17:35 [Hengzhe Zhang](#), [Qi Chen](#), [Bing Xue](#), [Wolfgang Banzhaf](#) and [Mengjie Zhang](#)  
**Improving Generalization of Evolutionary Feature Construction with Minimal Complexity Knee Points in Regression** [\(abstract\)](#)

**16:20-18:00** Session 11C: EvoApplications 7 - Analysis of EC Methods: Theory, Empirics, and Real-World Applications

CHAIRS: [Quentin Renau](#) and [Sébastien Verel](#)

LOCATION: [Room C](#)

- 16:20 [Oliver L. Preuß](#), [Jeroen Rook](#) and [Heike Trautmann](#)  
**On the Potential of Multi-Objective Automated Algorithm Configuration on Multi-Modal Multi-Objective Optimization Problems** [\(abstract\)](#)
- 16:45 [Aidan Walden](#) and [Maxim Buzdalov](#)  
**A Simple Statistical Test Against Origin-Biased~Metaheuristics** [\(abstract\)](#)
- 17:10 [Quentin Renau](#) and [Emma Hart](#)  
**On the Utility of Probing Trajectories for Algorithm-Selection** [\(abstract\)](#)
- 17:35 [Lea Musiolek](#), [David Bierbach](#), [Nils Weimar](#), [Myriam Hamon](#), [Jens Krause](#) and [Verena V. Hafner](#)  
**Evolving Artificial Neural Networks for Simulating and Analyzing Fish Social Interactions** [\(abstract\)](#)

Friday, April 5th

View this program: [with abstracts](#) [session overview](#) [talk overview](#)

**09:30-11:35** Session 12A: EvoMUSART 5 - Natural Language-Driven Audio-Visual Generation

CHAIR: [Aniko Ekart](#)

LOCATION: [Room A](#)

- 09:30 [Peter Nguyen](#), [Javier Fernández](#) and [Olaf Witkowski](#)  
**AI-Driven Meditation: Personalization for Inner Peace** [\(abstract\)](#)
- 09:55 [Jon McCormack](#), [Maria Teresa Llano Rodriguez](#), [Stephen Krol](#) and [Nina Rajcic](#)  
**No Longer Trending on Artstation: Prompt Analysis of Generative AI Art** [\(abstract\)](#)

- 10:20 [Marvin Zammit](#), [Antonios Liapis](#) and [Georgios N. Yannakakis](#)  
**MAP-Elites with Transverse Assessment for Multimodal Problems in Creative Domains** ([abstract](#))
- 10:45 [David Cabrera Dalmazzo](#), [Ken Déguernel](#) and [Bob L. T. Sturm](#)  
**The Chordinator: Modeling Music Harmony By Implementing Transformer Networks and Token Strategies** ([abstract](#))
- 11:10 [Parker Carlson](#) and [Patrick J. Donnelly](#)  
**Deep Learning Approaches for Sung Vowel Classification** ([abstract](#))

**09:30-11:35** Session 12B: EvoCOP 3 - Operators and theory

CHAIR: [Darrell Whitley](#)

LOCATION: [Room B](#)

- 09:30 [Cyril Grelier](#), [Olivier Goudet](#) and [Jin-Kao Hao](#)  
**A memetic algorithm with adaptive operator selection for graph coloring** ([abstract](#))
- 09:55 [Darrell Whitey](#), [Gabriela Ochoa](#) and [Francisco Chicano](#)  
**Reduction-Based MAX-3SAT with Low Nonlinearity and Lattices Under Recombination** ([abstract](#))
- 10:20 [Sébastien Verel](#), [Sarah Thomson](#) and [Omar Rifki](#)  
**Where the Really Hard Quadratic Assignment Problems Are: the QAP-SAT instances** ([abstract](#))
- 10:45 [Thomas Jansen](#) and [Christine Zarges](#)  
**Experimental and Theoretical Analysis of Local Search Optimising OBDD Variable Orderings** ([abstract](#))
- 11:10 [Jonathan Rowe](#)  
**A Theoretical Investigation Of Termination Criteria For Evolutionary Algorithms** ([abstract](#))

**09:30-11:35** Session 12C: EML 3 - Applied EML

CHAIR: [F. Penousal Machado](#)

LOCATION: [Room C](#)

- 09:30 [Atanu Mazumdar](#) and [Ville Kyrki](#)  
**Hybrid Surrogate Assisted Evolutionary Multiobjective Reinforcement Learning for Continuous Robot Control** ([abstract](#))  
PRESENTER: [Atanu Mazumdar](#)
- 09:55 [Qinyu Wang](#), [Ying Bi](#), [Bing Xue](#) and [Mengjie Zhang](#)  
**Genetic Programming with Aggregate Channel Features for Flower Localization Using Limited Training Data** ([abstract](#))
- 10:20 [Cosijoppii Garcia-Garcia](#), [Alicia Morales-Reyes](#) and [Hugo Jair Escalante](#)  
**Progressive Self-Supervised Multi-Objective NAS for Image Classification** ([abstract](#))  
PRESENTER: [Cosijoppii Garcia-Garcia](#)
- 10:45 [Erdi Sayar](#), [Vladislav Vintaykin](#), [Giovanni Iacca](#) and [Alois Knoll](#)  
**Hindsight Experience Replay with Evolutionary Decision Trees for Curriculum Goal Generation** ([abstract](#))

**12:05-13:05** Session 13: Plenary invited talk: Sabine Hauert

CHAIR: [Emma Hart](#)

LOCATION: [Room A](#)

**13:05-13:35** Session 14: Conference closing

CHAIR: [F. Penousal Machado](#)

LOCATION: [Room A](#)

**14:20-15:20** Session 15: SPECIES society AGM

CHAIR: [F. Penousal Machado](#)

LOCATION: [Room A](#)