

World Congress on Global Optimization 2021

CONFERENCE PROGRAM JULY 7-10, 2021

Wednesday, July 7, 2021

Time	
15:45 p.m. Athens time (8:45 a.m. EDT)	Opening Remarks: WCGO 2021 General Chair -Panos M. Pardalos Opening Remarks: International Society of Global Optimization President Yaroslav D. Sergeyev http://www.globaloptimization.org/
16:00 – 19:00	Session 1 Chair: Pierre Miasnikof
16:00 p.m. Athens time	Yaroslav Sergeyev - Lipschitz Global Optimization
16:30 p.m. Athens time	Maria Chiara Nasso - Lipschitz and Hölder global optimization using space-filling curves
17:00 p.m. Athens time	Christian Füllner, Peter Kirst, Hendrik Otto and Steffen Rebennack - Feasibility verification and upper bound determination in global minimization
17:30 p.m. Athens time	Oleg Khamisov and Mikhail Posypkin - Univariate global optimization methods based on generalized convexity properties
18:00 p.m. Athens time	Yanlin Zha and Benoit Chachuat - A Sparse Set Arithmetic using Interval-valued Chebyshev Polynomials
18:30 p.m. Athens time	Dillard Robertson, Joseph Scott and Pengfei Cheng - Convergence Order Analysis for Decomposition Methods for Global Nonconvex Stochastic Optimization
19:00 p.m. Athens time	Break
19:15 – 22:45	Session 2 Chair: Varun Ojha
19:15 p.m. Athens time	Konstantinos Parsopoulos, Vasileios Tassis, Ilias Kotsireas and Panos Pardalos - Parallel Algorithm Portfolios with Adaptive Resource-Allocation Strategy
19:45 p.m. Athens time	Dominik Bongartz, Samuel J. Smucny, Linus Netze, Jaromil Najman, Artur M. Schweidtmann and Alexander Mitsos - Parallel Computing for Deterministic Global Optimization
20:15 p.m. Athens time	Saulius Tautvaisas and Julius Žilinskas - Scalable Bayesian Optimization with Generalized Product of Experts
20:45 p.m. Athens time	Jan Kronqvist, Ruth Misener and Calvin Tsay - A Hierarchy of Relaxations between big-M and Convex Hull Formulations
21:15 p.m. Athens time	Jason Ye and Joseph Scott - Improved Convex Relaxations with Dynamic Cuts for Global Dynamic Optimization
21:45 p.m. Athens time	Hoang Phuc Hau Luu, Hoai An Le Thi and Tao Pham Dinh - Acceleration techniques in DC programming
22:15 p.m. Athens time	Nevena Mijajlovic and Milojica Jacimovic - Continuous extra-gradient method for quasi-variational inequalities

Thursday, July 8, 2021

Time	
16:00 – 19:00	Session 3 Chair: Yaroslav Sergeyev
16:00 p.m. Athens time (9:00 a.m. EDT)	Sergiy Butenko, Mykyta Makovenko and Miltiades Pardalos - A Hierarchy of Standard Polynomial Programming Formulations for the Maximum Clique Problem
16:30 p.m. Athens time	Tanuj Karia, Claire Adjiman and Benoit Chachuat - Global Optimization of Mixed-Integer Polynomial Programs via Quadratic Reformulation: Impact of Pre-processing Strategies
17:00 p.m. Athens time	Oleg Prokopyev, Xueyu Shi and Ted Ralphs - Mixed Integer Bilevel Optimization with k-optimal Follower: A Hierarchy of Bounds
17:30 p.m. Athens time	Ovanes Petrosian, Anna Zholobova, Violetta Kochomanova, Mariya Peglivanova and Yefim Zholobov - Industry Maintenance Planning Optimization Problem using MINLP
18:00 p.m. Athens time	Hu Chaoming, Cheng Hao, Qian Xiaofei, Liu Xinbao and Panos M Pardalos - Joint production and maintenance scheduling with maintenance resource constraints
18:30 p.m. Athens time	Carlos Jose Nohra Khouri, Arvind U Raghunathan and David Bergman - Minimum Linearization of Multilinear Programs
19:00 p.m. Athens time	Break
19:15 – 22:45	Session 4 Chair: Saulius Tautvaisas
19:15 p.m. Athens time	Ashkan Fakhri, Antonios Fragkogios and Georgios K.D. Saharidis - An Accelerated Benders Decomposition Algorithm for Solving a Double-type Double-standard Maximal Covering Location Problem
19:45 p.m. Athens time	Pierre Miasnikof, Mohammad Bagherbeik and Ali Sheikholeslami - Graph Clustering with a Permutational Boltzmann Machine
20:15 p.m. Athens time	Joelle Ferzly, Martin Vohralik, Soleiman Yousef and Ibtihel Ben Gharbia - Semismooth and smoothing Newton methods for nonlinear systems with complementarity constraints: adaptivity and inexact resolution
20:45 p.m. Athens time	Muhammad Munir Butt - 3D multigrid solver for stationary Navier-Stokes control problems
21:15 p.m. Athens time	Michael Wagner, Charles J. Colbourn and Dimitris E. Simos - In-Parameter-Order strategies for covering perfect hash families
21:45 p.m. Athens time	Alexei Kaltchenko - Computational complexity of qubit preparation and compiling in quantum computing
22:15 p.m. Athens time	Martin Bohner, Giuseppe Caristi, Shapour Heidarkhani and Amjad Salari - Critical point approaches to nonlinear square root Laplacian equations

Friday, July 9, 2021

Time	
16:00 – 19:00	Session 5 Chair: Maxim Sakharov
16:00 p.m. Athens time (9:00 a.m. EDT)	Alla Kammerdiner, Alexander Semenov and Eduardo Pasillao - Landscape-theoretic properties of the metaheuristics using very large-scale search for the multi-dimensional assignment problem
16:30 p.m. Athens time	Maxim Sakharov, Kamila Koledina, Irek Gubaydullin and Anatoly Karpenko - Parallel Memetic Global Optimization Algorithm for Optimal Control of Gasoline's Catalytic Reforming
17:00 p.m. Athens time	Thomas Hübner, Marcel Sinske and Steffen Rebennack - Global optimization of nonconvex and nonsmooth separable programming problems with application to the economic dispatch of power plants
17:30 p.m. Athens time	Julius Žilinskas, Algirdas Lančinskas, Pascual Fernández and Blas Pelegrin - Competitive facility location with uncertainty in customer behavior
18:00 p.m. Athens time	Algirdas Lančinskas, Julius Žilinskas, Pascual Fernández and Blas Pelegrin - Population-based algorithm for facility location with ranking of location candidates
18:30 p.m. Athens time	Martin Buisson, Mélina Ribaud, Céline Helbert, Stéphane Aubert and Manuel Henner - Fan design using a low-fidelity turbomachinery model and cokriging-based optimization with multi-point infill sampling
19:00 p.m. Athens time	Break
19:15 – 22:45	Session 6 Chair: Maude Josee Blondin
19:15 p.m. Athens time	Sokoufeh Naderi, Maude Josee Blondin and Behrooz Rezaie - Optimizing an Adaptive Interval Type-2 Fuzzy Logic Controller of a Three Degree-of-Freedom Helicopter through a Modified PSO Algorithm
19:45 p.m. Athens time	Kaining Shao, Wenjuan Fan, Shaowen Lan, Zishu Yang and Shanlin Yang - A general variable neighborhood search algorithm for a PET/CT examination scheduling problem considering multi-stage process and deteriorating effect
20:15 p.m. Athens time	Varun Ojha, Bartolomeo Panto and Giuseppe Nicosia - Global Optimization Algorithms for Incremental Static Analysis of Structures with Geometric Nonlinearity
20:45 p.m. Athens time	Nader Kanzi, Giuseppe Caristi and David Barilla - Necessary Conditions for Optimality of Nonsmooth Multiobjective Generalized Semi-Infinite Programming Problems
21:15 p.m. Athens time	Ioannis Demetriou and Demetrius Davos - The least squares convex - concave approximation method applied to COVID-19 data
21:45 p.m. Athens time	Anastasia Markelova, Ovanes Petrosian, Pavel Kudin and Vitalii Novgorodtcev - Optimizing Energy Demand-side Strategies for Energy Storage System Control using Linear Programming
22:15 p.m. Athens time	Linas Stripinis and Remigijus Paulavicius - Implementation of the first DIRECT-type toolbox (DGO) and an extensive experimental study of DGO and various partitioning and selection techniques

Saturday, July 10, 2021

Time	
	Chair: Panos M. Pardalos
16:00 p.m. Athens time (9:00 a.m. EDT)	Caratheodory lecture Caratheodory lecture Young Research Prize Lecture Young investigator lecture Student Paper Award
19:00 p.m. Athens time	Meeting of the International Society of Global Optimization Business issues regarding ISOGO
19:30 p.m. Athens time (12:30 p.m. EDT)	Closing Remarks: WCGO 2021 General Chair - Panos M. Pardalos WCGO 2021 Program Committee Chair - Julius Žilinskas WCGO 2021 Local Chair – Ilias S. Kotsireas