

The **World Congress on Global Optimization (WCGO)** is a biennial conference of the International Society of Global Optimization.

The **6<sup>th</sup> WCGO** will be organized in **Metz, France** on **July 8-10, 2019**, by the Computer Science and Applications Department, LGIPM, University of Lorraine.

<https://wcgo2019.event.univ-lorraine.fr/>

WCGO 2019 will bring together most leading specialists in both theoretical and computational aspects as well as applications of Nonconvex Programming and Global Optimization, highlight recent advances, trends, challenges and to discuss how to expand the role of these fields in several potential high-impact application areas.

The conference offers an excellent forum for scientists, engineers, mathematicians from a variety of related disciplines, to exchange ideas and present original research results in the theory and applications of global optimization. WCGO 2019 will be composed of several plenary lectures, invited sessions, and contributed sessions.

## **PUBLICATIONS**

The conference proceedings will be published in the series [Advances in Intelligent Systems and Computing](#) of Springer-Verlag and indexed by ISI Proceedings, DBLP, Ulrich's, EI-Compendex, SCOPUS, Zentralblatt Math, MetaPress, Springerlink.

**Special Issues** in SCI journals for the post-conference publication are planned, which include

- *Journal of Global Optimization*
- *Optimization Letters*
- *Optimization and Engineering*
- Others to be announced.

## **VENUE**

**Metz**, located in the North East of France, about 330 kms away from the capital Paris and only 1 hour and 20 minutes by TGV, is a city open to urban ecology, to its heritage with architectural surroundings of the finest quality, to its economic environment, to New Information and Communication Technologies and to a dynamic cultural life.

## **IMPORTANT DATES**

Special session proposal: **December 1, 2018**

Paper submission deadline: **January 31, 2019**

Author notification: **February 28, 2019**

Early registration: **March 15, 2019**

Conference dates: **July 8-10, 2019**

## **CONFERENCE CHAIR**

Le Thi Hoai An, University of Lorraine, France

## **PROGRAM CO-CHAIRS**

Le Thi Hoai An, University of Lorraine, France  
Pham Dinh Tao, INSA-Rouen, France  
Yaroslav D. Sergeyev, University of Calabria, Italy

## **CALL FOR PAPER**

The **WCGO 2019** invites all researchers and practitioners working in areas related to nonconvex optimization and its applications to submit works for consideration.

We encourage all types of contributions including theory, algorithms, and applications, in particular on emergent domains such as Data science, Big data, Robotics, ...

You are kindly invited to submit a paper (limited by **10 pages**), using LNCS/LNAI style.

**Topics** include (but not limited to):

### **1 - Continuous Optimization and Applications**

- Nonlinear programming
- Global Optimization
- DC programming
- Nonsmooth Optimization
- Sparse Optimization
- Polynomial Optimization
- Semidefinite Programming
- Semi-infinite Programming
- Variational Inequalities and Complementarity. Mathematical Programs with Equilibrium Constraints
- Optimal Control, PDE Constrained Optimization, and Multilevel Methods

### **2 - Discrete Optimization, Integer Programming and Applications**

- Integer Programming Theory
- Integer Programming Algorithms
- MINLP: Mixed Integer Non-linear Programming
- Constraint Programming

### **3 - Optimization under Uncertainty and Applications**

- Stochastic Optimization
- Robust Optimization
- Dynamic Programming, Markov Decision Processes, and Simulation
- Game theory

### **4 - Multiobjective Optimization, Multilevel Programming**

### **5 - Optimization in Specific areas: Models, Algorithms, and Software**

- Data science: Machine Learning, Big Data, Cloud Computing, and Huge-Scale Optimization

- Network: Network Flow, Network Design, and Applications in Telecom and Traffic Management
- Logistics: Packing, Logistics, Location, and Routing
- Scheduling: Scheduling, Planning and Applications in Manufacturing Systems and Healthcare
- Energy: Optimization for Environmental, Energy and Engineering Systems
- Computational Biology
- Societal Issues
- Finance, and Economics
- Robotics
- Mathematical Programming Algorithm Implementations, Parallel Computing, and Software

We look forward to seeing you in WCGO 2019, Metz, France.

Sincerely yours,  
On behalf of WCGO 2019 Publicity Chair