

Special sessions

Polynomial Optimization

6th World Congress on Global Optimization (WCGO 2019)

July 8 - 10, 2019, Metz, France

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

Organizer: Prof. Yi-Shuai Niu (Shanghai Jiao Tong University, China).
Email: niuyishuai@sjtu.edu.cn

Yi-Shuai Niu is a Professor of Mathematics in Optimization and Operation research at Shanghai Jiao Tong University. He is working at both the school of the mathematical sciences and the Paristech Elite institute of technology. He is interested in Optimization theories and algorithms for large-scale non-convex optimization (DC Programming, mixed-integer optimization, polynomial optimization, semi-definite optimization and eigenvalue optimization) as well as High performance computing in multidisciplinary sciences (deep learning and machine learning, financial optimization, natural language processing, transport-logistics, telecommunication, image processing, turbulent combustion, polymer science and quantum chemistry).

General description of the special session

This session will focus on optimization theories and methods on polynomial optimization and their applications.

Session topics:

Relevant topics include, but are not limited to, the following:

- Polynomial Optimization local and global approaches.
- DC programming and DCA for polynomial optimization.
- Algebraic techniques in polynomial decompositions (sums-of-squares, sums-of-squares convex, and difference of convex sums-of-squares etc.)
- Large-scale polynomial optimization.
- GPU and CPU parallel computing techniques in polynomial optimization.
- Lasserre moment relaxation and Lasserre hierarchy.
- Semi-definite programming relaxations and convex relaxations.
- Various applications of polynomial optimization.
- ...

Submission

Submissions are open at <https://wcgo2019.event.univ-lorraine.fr/page/submissions>
(Select the track “Special Session - Polynomial Optimization”)

Important dates:

January 31, 2019	Deadline for the submission
February 28, 2019	Notification of acceptance/rejection