Special sessions

Spline Approximation & Optimization with Applications

6th World Congress on Global Optimization (WCGO 2019) July 8 - 10, 2019, Metz, France <u>https://wcgo2019.event.univ-lorraine.fr/</u>

Organizers: Dr. Ahmed Zidna and Dr. Dominique Michel (University of Lorraine, France).

General description of the special session

This workshop is devoted to the publications of high-quality papers on technical developments and practical applications that combine spline Approximation and optimization methods. It is well-known that splines constitute an elegant framework for dealing with approximation, interpolation and discretization problems. They are widely used in computer-aided design and computer graphics. Thanks to their nice properties, the splines offer a best cost-performance tradeoff among available interpolation methods. During the last two-decades, they have been used in many other research and applications such as global optimization, medical image processing, signal processing, classification pattern recognition, handwriting and fingerprint recognition, economics, engineering and general sciences and emerging new applications.... The goal of this workshop is to bring together computer science researchers, mathematicians, engineers and other specialists from a variety of related disciplines, to discuss approaches, algorithms and challenging applications dealing with spline approximation and optimization problems. We invite original and high-quality submissions addressing all aspects of this.

Topics of interest

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

- Approximation Methods in Optimization
- Polynomial and rational approximation
- Bernstein and B-spline Approximations in global optimization
- Curve and Surface Fitting with optimization
- Data approximation with smooth splines
- Bio-inspired optimization and spline approximation
- Shape Optimization
- Optimization and control
- Spline multi-resolution analysis
- Computer Aided Geometric Design
- Computer Graphics

We invite you to contribute a talk in any of the above fields. 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. Please follow the Proceedings link for more details about the abstract submission and the fulltext papers.

Proposed Session Program Committee (to be invited)

- Prof. Gudrun Albrecht
- Prof. Jürgen Garloff
- Prof. Domingo Barrera
- Prof. Driss Sbibih
- Prof. Miguel Pasadas
- Prof. Paluri Nataraj
- Prof. Abderrahman Bouhamidi
- Prof. Marc Daniel
- Prof. Dominique Bechmann
- Prof. Sebti Foufou

Submission

Submissions are open at <u>https://wcgo2019.event.univ-lorraine.fr/page/submissions</u> (Select the track "Special Session - Spline Approximation & Optimization with Applications")

Important dates:

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