

FIREWORKS ALGORITHM AND ITS APPLICATIONS

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Fireworks Algorithm (FWA) is a newly proposed swarm intelligence (SI) algorithm, which has shown a great success on solving many complex optimization problems, including not only the benchmark functions but also the real-world problems. Compared to other SI algorithms, such as Particle Swarm Optimization, Ant Colony Optimization and Genetic Algorithm, it has a new search manner in the solution space and is a strong capability of optimization computation.

FWA achieved great success on solving many complex optimization problems effectively. FWA has a unique search manner in the solution space and is a strong capability to solve optimization problems. It has many effective variants and huge amount of successful applications. Moreover, FWA is suitable for parallelization and works significantly better than other SI algorithms, such as particle swarm optimization, ant colony optimization and genetic algorithm.

The main aim of this special session is to bring together both experts and new-comers from either academia or industry to discuss fireworks algorithm and its application. However, both the improvement of FWA and the application of FWA are acceptable for this special session.

Full papers are invited on recent advances in the development of FWA, i.e., FWA improvements and applications.

Topics

- Theoretical analysis of FWA
- Algorithmic improvement of FWA
- FWA for single-, multi-, and many-objective optimization
- FWA for data mining and machine learning
- FWA for data analysis
- Parallelized and distributed realizations of FWA

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SPECIAL SESSIONS

- Applications of FWA