

**evoapplications\***

**27th European Conference  
on the Applications of Evolutionary  
and bio-inspired Computation**

part of **evo\* 2024**  
[www.evostar.org](http://www.evostar.org)

Aberystwyth, Wales, UK  
3 – 5 April 2024

**evoapps\***

special session on

# Problem Landscape Analysis for Efficient Optimization

Problem landscapes of various kinds, such as fitness landscapes, violation landscapes, and multiobjective problem landscapes, are increasingly being studied and exploited in search and optimization. They may serve multiple purposes. By using features derived from the landscapes, one can characterize and better understand the problem at hand. Landscapes may also be used to explain the behavior of algorithms and predict their performance. Based on this approach, one can select or configure appropriate algorithms as well.

This special session aims to strengthen research on problem landscape analysis and its exploitation in solving real-world problems. Its purpose is to bring together researchers and practitioners interested in contributing to this challenging area and benefiting from its most recent achievements. Theoretical and empirical studies, as well as examples from practical applications, are all welcome.

Topics of interest include, but are not limited to:

- \* Fitness / violation / multiobjective problem landscapes
- \* Sampling for problem landscape analysis
- \* Landscape feature selection / construction
- \* Exploratory landscape analysis
- \* Local optima networks
- \* Search trajectory networks
- \* Problem characterization / understanding
- \* Machine learning on landscape data
- \* Landscape metrics
- \* Algorithm selection / configuration / construction
- \* Algorithm performance prediction
- \* Landscape visualizations
- \* Applications of problem landscape analysis

**Extended Submission deadline:**  
15 November 2023

**Organizers**

Bogdan Filipič, Jožef Stefan Institute (SI)  
Pavel Krömer, Technical University  
of Ostrava (CZ)

More info at:

[www.evostar.org/2024/evoapps/plafeo](http://www.evostar.org/2024/evoapps/plafeo)

**EXTENDED  
DEADLINE**