

**evoapplications\***

**25th European Conference  
on the Applications of Evolutionary  
and bio-inspired Computation**

part of **evo\* 2022**

[www.evostar.org](http://www.evostar.org)

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**evoapps\***

special session on

# Analysis of Evolutionary Computation Methods: Theory, Empirics, and Real-World Applications

**evo\***  
2022

Theory, empirics, and practice are often considered in isolation in our research community. However, recent work has demonstrated that collaboration across the three different types of research can be highly mutually beneficial. For example, empirical results serve as proof of concept for real-world applications and inspiration for new theoretical considerations. Theoretical insights can provide necessary insights into problem properties and algorithm behaviour and hence improve the applicability of heuristics in empirics and practice. Real-world problems provide inspiration for new theoretical and empirical studies and inform the development of important benchmarks. This special session aims at bridging the gap between theory, empirics, and practice in evolutionary computation by fostering communication, discussion and exchange across different parts of the community.

We welcome contributions from all areas of evolutionary computation and other randomised search heuristic, irrespective of the nature of the considered problems or search spaces.

Particular areas of interest include but are not limited to:

- \* Carefully designed empirical studies;
- \* Theoretical work highlighting the insights generated by the analyses performed;
- \* Examples of successful knowledge transfer of theoretical analysis or empirical studies into a practical scenario;
- \* Theory that is inspired by phenomena observed in practice or empirical analyses;
- \* Efficient means to bridge the gap between theory, empirics, and practice such as benchmarking.

**Organizers**

Thomas Bartz-Beielstein, TH Köln (DE)  
Carola Doerr, Sorbonne Université (FR)  
Christine Zarges, Aberystwyth University (UK)

More info at:

<http://www.evostar.org/2022/evoapps/tmp/>