Scope of the Conference

Swarm intelligence is the discipline that deals with the study of self-organizing processes both in nature and in artificial systems. Researchers in ethology and animal behavior have proposed a number of models to explain interesting aspects of collective behaviors, such as movement coordination, shape-formation, and decision making. Recently, algorithms and methods inspired by these models have been proposed to solve difficult problems in many domains. Among these, we particularly mention ant colony optimization (ACO) and particle swarm optimization (PSO), focusing respectively on discrete and continuous optimization problems. Another field of techniques derived from swarm intelligence is swarm robotics with focus on designing collaborative multi-robot systems that show high degrees of robustness and scalability. With ANTS 2022 we want to give researchers in swarm intelligence the opportunity to meet, to present their latest research, and to discuss current developments and applications. The three-day conference will be held for the first time in Malaga, Spain, on November 2-4, 2022.

Relevant Research Areas

ANTS 2022 solicits contributions dealing with any aspect of swarm intelligence. Typical, but not exclusive, topics of interest are:

- behavioral models of social insects or other animal societies that can stimulate new algorithmic approaches
- theoretical and empirical research in swarm intelligence
- application of swarm intelligence methods (e.g., ant colony optimization, particle swarm optimization) to real-world problems
- theoretical and experimental research in swarm robotics systems

Important Dates

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<tr>
<th>Event</th>
<th>Date</th>
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<tr>
<td>Submission deadline</td>
<td>April 15, 2022</td>
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<tr>
<td>April 30, 2022 (Final Deadline Extension)</td>
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<tr>
<td>Notification of acceptance</td>
<td>June 15, 2022</td>
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<td>Camera ready copy</td>
<td>June 29, 2022</td>
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<tr>
<td>Conference</td>
<td>November 2-4, 2022</td>
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Publication details

Conference proceedings will be published by Springer in the LNCS series, as those of the last editions of the ANTS Conference. The journal Swarm Intelligence will publish a special issue dedicated to ANTS 2022 that will contain extended versions of the best research works presented at the conference. Further details will soon be published on the web site.

Conference Location

The conference will be hosted by the University of Málaga in a historical building close to the city center and the touristic port of Málaga, Spain.

ANTS 2022 Organizing Committee

General chairs
Marco Dorigo, Université Libre de Bruxelles, Bruxelles, Belgium
Heiko Hamann, University of Lübeck, Lübeck, Germany

Local organisation and publicity chair
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Paper submission chair
Christian Camacho Villalón, Université Libre de Bruxelles, Bruxelles, Belgium

Further Information

Up-to-date information will be published at the following address: https://ants2022.uma.es