



WIVACE 2023
XVII Workshop on Artificial Life and Evolutionary Computation
ECLT: European Centre for Living Technology (Venice, Italy)
September 6-8, 2023

CALL FOR PAPERS

The International Workshop on Artificial Life and Evolutionary Computation aims at bringing together researchers to present and share their results and ideas in a multidisciplinary context. The workshop provides a forum for the discussion of new research directions and applications in Artificial Life, Evolutionary Computation and in related fields, where different disciplines and research areas could effectively meet. It was first held in 2007 in Sampieri (Ragusa), as the incorporation of two previously separately running workshops (WIVA and GSICE). After the success of the first edition, the workshop was organized in the following years in Venice ([2008](#)), Naples (2009), Parma ([2012](#)), Milan ([2013](#)), Vietri (2014), Bari ([2015](#)), Salerno (2016), Venice ([2017](#)), Parma ([2018](#)) and Rende (2019). After a covid-related gap year, it was organized in Winterthur (CH) (2021) and Gaeta (2022).

KEYNOTE SPEAKERS

The list of confirmed keynote speakers comprise:

- **Wolfgang Banzhaf** Michigan State University
- **Joana Xavier** University College London
- **Michele Vendruscolo** University of Cambridge

TOPICS

Contributions are solicited on a variety of topics, including but not limited to:

- Bioinspired Algorithms
- Bioinspired Robotics
- Coevolution and Collective Behavior
- Complex Systems
- Data-driven Self-regulating Systems
- Evolutionary Computation
- Evolutionary Approaches to Big Data and Big Data Streams
- Evolutionary Learning Systems
- Evolutionary Agents
- Modeling and Simulation of Artificial and Natural Systems
- Modeling and Simulation of Social and Economical Systems
- Modeling of Business Intelligence Systems
- Neural Computers

- Neuroevolution: Improving Deep Learning with Evolutionary Computation
- Self-organizing Cyber-Physical Systems
- Socio-inspired Swarm Intelligence Algorithms
- Synthetic and Systems Biology
- Systems Chemistry
- Theories and Applications of Artificial Life

SUBMISSIONS

All submissions must be made electronically, and will be peer reviewed by members of the program committee. At least one author of each accepted work has to register for the conference and present his work.

Contributions may be submitted in one of the following forms:

1. **Full research papers (up to 12 pages)**
 2. **Extended abstracts (1-4 pages)**
 3. **Summaries of already published papers (1-4 pages).**
- Accepted full research papers shall describe original unpublished work, and they will be included in the Proceedings volume (see below for details). Their authors will have to revise their paper (if requested) on the basis of reviewers' comments and they will be asked to send a camera ready version of their manuscripts soon after the end of the workshop
 - Accepted extended abstracts will be printed in a booklet which will be available at the conference. Their authors will be asked to develop them in a full paper, to be submitted soon after the end of the conference, which will be reviewed like full research papers and, if accepted, will be included in the Proceedings volume.
 - Accepted summaries of already published work will be printed in a booklet which will be available at the conference, and they will not be printed in the Proceedings volume. They should describe some results which are of particular relevance and interest for the Wivace community, where they will be the subject of short oral presentations.

The workshop proceedings will be published by **Springer**, in the [Communications in Computer and Information Science \(CCIS\)](#) series, which is abstracted/indexed in DBLP, Google Scholar, EI-Compendex, Mathematical Reviews, SCImago, Scopus.

IMPORTANT DATES

- Abstract/paper submission deadline: ~~4 June 2023~~
>> EXTENDED deadline: 18 June 2023, sharp
- Notification of acceptance: **6 August 2023**
- Conference: **06-08 september 2023**
- Submission of post-conference version: **15 October 2023**

If you need some extra time to complete your paper or your extended abstract, please let us know in advance by sending an email to wivace2023@unive.it.

TRAVEL AND ACCOMODATION

Please take into account that Venice is really crowded in early September, so don't forget to book you hotel months in advance. Some useful information can be found on the conference website.

WEB SITE

More information, updates and news can be found on the WIVACE2023 website, at the URL:

www.unive.it/wivace2023

ORGANIZATION

Workshop chairs

Marco Villani

Università di Modena e Reggio Emilia, ECLT fellow

Roberto Serra

Università di Modena e Reggio Emilia, ECLT fellow

Stefano Cagnoni

Università di Parma

Local Chair

Achille Giacometti

Ca' Foscari University of Venice, ECLT Director

Local Organizers

The workshop will be organized by the staff of the **European Centre for Living Technology (ECLT)** and of the CESA (Ca' Foscari University of Venice), and by **Tatjana Skrbic** (Ca' Foscari University of Venice), **Jacopo Moi** (Ca' Foscari University of Venice), **Gianfranco Lombardo** (University of Parma) and **Gianluca d'Addese** (University of Modena and Reggio Emilia)

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