



## Quantum Machine Intelligence

Editor-in-Chief: Giovanni Acampora

### Topical Collection

## Quantum Techniques in Machine Learning 2023

### Guest Editors:

Michele Grossi, Zoë Holmes and Alessandra Di Pierro

### Important dates:

- **Submission**  
**1st April 2024**
- **Notification**  
**30th September 2024**

### Topical Collection Description:

This topical collection will include extended versions of original results on the development of quantum techniques in machine learning presented at the 7th International Conference on Quantum Techniques in Machine Learning, QTML 2023, that was held on 20-24 November 2023 at CERN, Switzerland.

The QTML 2023 scientific programme consisted of 86 presentations and 160 posters with 333 attendants plus around 100 people following via the webcast.

This call is for all the unpublished results that were presented at the conference either orally or as a poster and that can be further refined in complete papers and relaborated possibly taking into account the comments from the audience. Each submission will be thoroughly refereed according to the standards of the Journal of Quantum Machine Intelligence.

### Topics include but are not limited to:

- Quantum algorithms for machine learning tasks
- Quantum state reconstruction from data
- Machine learning for experimental quantum information
- Machine learning for Hamiltonian learning
- Variational quantum algorithms
- Learning and optimization with hybrid quantum-classical methods
- Quantum machine learning applications for industry
- Tensor network methods and quantum-inspired machine learning
- Data encoding and processing in quantum systems
- Quantum software
- Quantum learning theory

### Submission Information:

Articles must be submitted through the QUMI Editorial System using the link: <https://www.editorialmanager.com/qumi/default.aspx>

When submitting your paper, please select

**“SI: QTML 2023: Quantum Techniques in Machine Learning”**

as Article Type, so as to make sure that your paper is assigned to the special issue guest editors.

Please see the Instructions for Authors on the journal site ([link.springer.com](http://link.springer.com)) if you have not yet submitted a paper through this web-based system.