

Applications are invited for a **two-year postdoctoral position at IFISC** (Institute for Cross-Disciplinary Physics and Complex Systems, CSIC-UIB), a member of the Units of Excellence (María de Maeztu) of cutting-edge research centres in Spain. The offered postdoctoral position is associated with the research line on **Quantum Machine Learning and Reservoir Computing** (<https://ifisc.uib-csic.es/en/research/projects/quaresc/>). The appointed post-doc will focus on the exploration of different implementations of quantum reservoir computing and other quantum machine learning methods to assess the possibility of a quantum advantage in the context of noisy intermediate-scale quantum computing (NISQ) or analogue photonic, atomic and superconducting qubit platforms.

Recent works of our team on this subject are:

- R. Martínez-Peña, G. L. Giorgi, J. Nokkala, M. C. Soriano, and R. Zambrini, PRL 127, 100502 (2021)
- J. Nokkala, R. Martínez-Peña, G. L. Giorgi, V. Parigi, M. C. Soriano, and R. Zambrini, Communications Physics 4, 53 (2021)
- P. Mujal, R. Martínez-Peña, J. Nokkala, J. García-Beni, G. L. Giorgi, M. C. Soriano, and R. Zambrini, Advanced Quantum Technologies 4, 2100027 (2021)

The candidate should hold a PhD and have experience in at least one of the following topics:

- Quantum Machine Learning
- Reservoir Computing
- Quantum Computing
- Quantum Networks

Interested candidates should send the following information **by 31/03/2022** to roberta@ifisc.uib-csic.es:

- Curriculum vitae
- Brief letter of motivation to work at IFISC and research interests.
- Name of two senior scientists who can send reference letters

We are committed to diversity in the workplace and women are encouraged to apply. The contract can start immediately and no later than Summer 2022. The estimated gross annual salary is 30000€ The contract includes all the benefits of the Spanish Public Health and Social Security system and has associated additional financial support for the participation in conferences and scientific meetings.