



## Postdoctoral positions in quantum algorithms

The theoretical group of *Quantum Algorithms*, directed by Prof. Leandro Aolita at the *Quantum Research Centre* (QRC) of the *Technology Innovation Institute* (TII) in Abu Dhabi, United Arab Emirates, is seeking extremely well-qualified and motivated researchers at the post-doc level.

TII is a newly-established, top-funding state initiative that aims at becoming a major international hub for Science & Technology (see <https://www.tii.ae/>). The QRC at TII is launching world-class theoretical and experimental research groups on different quantum technologies (see <https://quantum.tii.ae/about-us-quantum>).

The *Quantum Algorithms Group* focusses on the development of quantum algorithms, with emphasis on quantum optimisation problems, quantum machine learning, and many-body quantum simulations. The group's interests are two-fold: practical primitives for near-term quantum devices as well as advanced procedures for future, fully-fledged universal quantum computers. Research activities will include hybrid classical-quantum approaches, neural- and tensor-network tools, quantum signal processing, quantum error correction or mitigation, computational complexity, verification or benchmarking schemes for quantum devices, and quantum-circuit compiling and optimisation, e.g.

The positions' profile is academic, but interactions with the quantum software industry may also take place. The positions are funded for three years, with an initial two-year appointment followed by a one-year extension upon mutual agreement. Salaries are well above the corresponding salary levels in the USA or Europe; and, besides the salary, other important personal and family allowances are provided by TII. Moreover, funds for travelling are also abundant.

The starting date can be any time in 2021, preferably during the first semester. There is no application deadline. However, applications will be reviewed as they are received, so interested candidates are strongly encouraged to apply as soon as possible.

Applications must be sent to [leandro.aolita@tii.ae](mailto:leandro.aolita@tii.ae) and should consist of a curriculum vitae, a brief letter of motivation (max. 1 page), a short summary of research experience and interests (max. 2 pages), and a list of publications. In addition, (at least) two recommendation letters should be arranged to be sent directly to the same E-mail.