

JOB OFFER no. Postdoc_MH_2023_09

Position in the project:	Postdoctoral Researcher for the ExTRaQT project no. UMO-2021/03/Y/ST2/00178
Scientific discipline:	quantum physics
Job type:	Full-time employment
Number of positions offered:	2
Remuneration:	PLN ~ up to 10.500 gross per month
Position starts on:	January 1st 2024
Maximum period of contract:	12 months per position
Institution:	International Centre for Theory of Quantum Technologies, University of Gdansk, Poland
Project leader:	Prof. dr hab. Michał Horodecki
Project title:	Experiment and Theory of Resources in Quantum Technologies (ExTRaQT) <i>The project financed within the QuantuEra II program by the National Science Center.</i>
Project description:	<p><u>About ICTQT</u> We are looking for the Postdoctoral Researcher to work in New Quantum Resources and Thermodynamics Group at the International Centre for Theory of Quantum Technologies (ICTQT). ICTQT was created in 2018 within the International Research Agendas Programme of the Foundation for Polish Science co-financed by the European Union from the funds of the Smart Growth Operational Programme, axis IV: Increasing the research potential (Measure 4.3). The founders of ICTQT are Marek Żukowski (the director) and Paweł Horodecki (the research group leader). The Centre's official partner is IQOQI-Vienna of the Austrian Academy of Sciences.</p> <p>The Centre consists of 6 groups: Multiphoton Quantum Optics for Quantum Information (leader Marek Żukowski); New Quantum Resources (leader Paweł Horodecki); Foundational Underpinnings of Quantum Technologies (leader Ana Belen Sainz); New Quantum Resources and Thermodynamics (leader Michał Horodecki); Quantum Cybersecurity and Communication (leader Marcin Pawłowski); Quantum Open Systems in Relation to Quantum Optics (leader Łukasz Rudnicki).</p> <p><u>About the group</u> The New Quantum Resources and Thermodynamics Group deals with a broad spectrum of topics, related to such resources as nonlocality/contextuality, entanglement, randomness, athermality, and others.</p> <p><u>Research task</u> Research task for scientists applying for the position in the ExTRaQT project: performing numerical simulations of dynamics of open quantum systems.</p>

Key responsibilities include:	<ol style="list-style-type: none"> 1. Active scientific research. 2. Presentation and discussion of ideas and results with a diverse audience at the ICTQT and at external events. 3. Active participation in seminars, group meetings, and other activities organized by the ICTQT.
Profile of candidates/requirement:	<ol style="list-style-type: none"> 1. PhD degree in physics, mathematics or computer science (obtained in 2017 or later). 2. Proven scientific record. 3. Experience in doing numerics on such platforms as Python is appreciated. 4. Good written and oral communication skills are appreciated. 5. The candidate should be committed to working collaboratively within an inclusive and diverse environment.
We offer:	<ol style="list-style-type: none"> 1. Full time employment in a rapidly developing unit - the International Centre for Theory of Quantum Technologies at the University of Gdansk. 2. Scientific and organizational support. 3. Basic equipment and core facilities. 4. Friendly, inspiring, interdisciplinary environment.
Required documents:	<p>All required documents should be prepared in English:</p> <ol style="list-style-type: none"> 1. Recruitment form. 2. Curriculum vitae. 3. A research resume with a list of publications and a list of ongoing research projects (with specification of candidate role in the research if unclear). 4. PDF files (or links if open access) of the 3 most relevant publications authored by the candidate. 5. A list of talks at conferences and workshops, and a list of prizes and awards. 6. Documents confirming academic degrees (a copy of a PhD diploma or a certificate of obtaining the title. NOTE: Before signing the employment contract, the person selected in the competition will be requested to submit to the University of Gdańsk the original of the PhD diploma. At the stage of employment, other documents will not be honoured). 7. Reference letters about the candidate sent directly by two senior researchers (the candidate is expected to contact the referees and ask them to send reference letters directly to ictqt-careers@ug.edu.pl. The letters must be sent before the deadline).
Recruitment process:	<ol style="list-style-type: none"> 1. The recruitment procedure has two stages: The pre-selection of candidates by the Selection Commission (SC) (based on the application form), and the Interview of the pre-selected candidates. 2. A postdoctoral position can be offered to candidates who received their PhD degree in 2017 or later. 3. An interview is expected in December, 2023. 4. ICTQT Selecting Commission (SC) reserves the right to invite for the interview only pre-selected candidates. 5. SC's decision is final and is not subject to appeal. 6. SC reserves the right to close the competition without selecting a candidate. 7. The decision will be made by SC within 1 months from the date of recruitment completion. 8. In the event of resignation from accepting the position of the selected candidate, the SC has the right to send the offer to the person placed on the reserve list, and in the absence of such a list, the SC has the right to reconsider the applications submitted to the competition and to indicate a new candidate application submitted to the competition and to indicate a new candidate.
Submit the documents to:	ictqt-careers@ug.edu.pl
Application deadline:	November 30, 2023