



JOB OFFER	
Position in the project:	Adjunct ^(*) (Post-doc)
Group of employees (research and teaching/research/teaching) ^(*)	Research
Scientific discipline:	Quantum optics and quantum information science, Physics <i>Fundamental properties of quantum systems and their applications in quantum technologies.</i>
Job type (employment contract/stipend):	Employment contract (full time ^(*))
Number of job offers:	1
Remuneration/stipend amount/month ("X0 000 PLN of full remuneration cost, i.e. expected net salary at X 000 PLN"):	13 000-18 000 PLN of full remuneration cost, i.e. expected net salary at 7 300 – 9 900 PLN
Position starts on:	1 August 2023 or later
Maximum period of contract/stipend agreement:	until 31 December 2023
Institution:	Centre of New Technologies, University of Warsaw
Project leader:	Professor Konrad Banaszek
Project title:	Quantum Optical Technologies <i>Project is carried out within the International Research Agenda Programme of the Foundation for Polish Science</i>
Project description:	Successful candidates will work on the following research topics: - Quantum resource theories: exploring fundamental features of quantum systems, such as quantum entanglement, coherence, and quantum thermodynamics. Addressing questions such as the state conversion problem, quantifying resource costs for quantum process implementation. - Quantum communication and quantum computation: application of quantum resource theories to quantify resource consumption in quantum communication protocols and to detect quantum features required for noisy quantum computation. - Open quantum systems: application of quantum entanglement and coherence to detect and quantify memory effects in open quantum systems.
Key responsibilities include:	<ol style="list-style-type: none"> Investigation of quantum features, such as entanglement and quantum coherence in quantum protocols. Preparation and dissemination of the research results at international workshops and conferences.
Profile of candidates/requirements:	Candidates should have a PhD degree in physics or related area and have research expertise and publications on quantum resource theories. Additionally, the candidate is expected to have good knowledge on semidefinite programming. University of Warsaw strongly values the diversity of candidates and is very



	committed to the equality of opportunity: http://en.uw.edu.pl/about-university/mission-statement-startegy/
Required documents:	<ol style="list-style-type: none"> 1. Motivation Letter 2. Current curriculum vitae; 3. Research record; 4. Consent clause for processing personal data in the application process, signed and scanned, or electronically signed, that can be downloaded from http://qot.cent.uw.edu.pl/positions/. 6. Signed declaration confirming that the candidate has read and accepted the rules of conducting competitions, covered in the following documents: Order of the Rector of UW No. 106 Par. 126 of the UW Statutes Resolution No. 443 of 26 June 2019
We offer:	<p>Participation in an exciting research program conducted within a newly established the Centre for Quantum Optical Technologies International Research Agenda Unit (QOT IRA Unit), with high scientific expectations and goals.</p> <p>Work within one of the labs operating within the QOT IRA Unit yet in close collaboration with Centre's theoretical and experimental groups, as well as other research teams specialising in quantum theory and its implementations within Warsaw's research community.</p> <p>An open and friendly research environment with access to all the facilities available within the Centre of New Technologies (CeNT)—an interdisciplinary research institute established within the University of Warsaw to gather international researchers of different backgrounds and experience, in order to conduct state-of-the-art research in biological, chemical and physical science: http://cent.uw.edu.pl/en/.</p> <p>Close collaboration with foreign institutions, with the necessary financial support of travels and scientific visits provided by the QOT IRAP Unit, in particular, with the University of Oxford (UK)—the strategic partner of the Unit.</p>
Please submit the following documents to:	E-mail address: qot-jobs@cent.uw.edu.pl
Application deadline:	07 July 2023
Deadline for the competition ^(*) :	<p>At the first stage of the recruitment process the applications will be evaluated by a selection committee appointed by the Director of Centre of New Technologies University of Warsaw. The recommended candidates might be asked for an interview. The information about the results of selection procedure will be sent by e-mail. The entire procedure will be concluded before 01 August 2023.</p> <p>The competition is the first stage of the procedure of recruitment for an academic teachers set out in the Statute of the University of Warsaw, and its positive result provides a basis for further proceedings.</p>
For more details about the position please visit (website/webpage address):	https://cent.uw.edu.pl/en/career/adjunct-post-doccent-16-2023/
Euraxess job/stipend offer (in case of PhD and postdoc positions):	https://euraxess.ec.europa.eu/jobs/113013

(*) – data required by the internal regulations of the institution.