

JOB OFFER

Position in the project:	PhD Student
Scientific discipline:	Physics
Job type (employment contract/stipend):	Scholarship
Number of job offers:	5
Remuneration/stipend amount/month (“X0 000 PLN of full remuneration cost, i.e. expected net salary at X 000 PLN”):	3 500 – 4 500 PLN gross/month
Position starts on:	01.10.2022 or later
Maximum period of contract/stipend agreement:	Until 30.04.2023 (with extension option)
Institution:	Centre of New Technologies, University of Warsaw
Project leader:	Professor Konrad Banaszek
Project title:	Quantum Optical Technologies (qot.uw.edu.pl) Project is carried out within the International Research Agenda Programme of the Foundation for Polish Science
Project description:	Successful candidates will work in a team of theorists and experimentalists on fundamental properties of quantum systems, such as quantum coherence and entanglement, and their applications in quantum technologies, such as quantum metrology, sensing, communication, and computation.
Key responsibilities include:	<ol style="list-style-type: none"> 1. Design and optimisation of quantum-enhanced protocols with the emphasis on their applications and implementations. 2. Analysis of the impact of noise and imperfections on real-life quantum devices and technologies. 3. Investigation of general quantum features, such as entanglement and quantum coherence, in quantum protocols and quantum computation 4. Preparation and dissemination of the research results at international workshops and conferences.
Profile of candidates/requirements:	<p>PhD candidates should hold a Master degree or an equivalent (or obtain it by the time of commencing the scholarship) in Physics, Mathematical Physics, Computer Science, Photonics, or similar field demonstrating research work in solving theoretical physics' problems. Moreover, education in quantum mechanics, optics and optical physics is required, as well as experience in using software tools to solve scientific tasks, such as e.g. mathematica, matlab, python or other scripting languages.</p> <p>PhD candidates should be registered as a PhD student at a Polish university, on the date of commencing work on the project.</p> <p>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/</p>
Required documents:	<ol style="list-style-type: none"> 1. Curriculum vitae with research record; 2. Academic transcript;

	<p>3. Contact details of at least one senior researcher familiar with candidate's work;</p> <p>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/ .</p>
We offer:	<p>Participation in an exciting research program conducted within a newly established centre with high scientific expectations and goals.</p> <p>Work within one of the theoretical labs operating within the QOT 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: http://quantum-warsaw.pl/.</p> <p>An open and friendly research environment with access to all the facilities available within the Centre of New Technologies)—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 unit, in particular, with the University of Oxford—the strategic partner of the unit.</p>
Please submit the following documents to:	Please send the application via email to qot-jobs@cent.uw.edu.pl
Application deadline:	19.08.2022