

COMPETITION ANNOUNCEMENT

The Dean of the Faculty of Physics, with the consent of the Rector of the University of Warsaw, announces a competition for the position of *Assistant Professor (Post-doc)* ¹ in the project SONATA BIS 13

About the programme/project/undertaking:

Title of project	High-dimensional entanglement in an integrated optical platform
Type of project	SONATA BIS 13
Funding institution	National Science Centre (Poland)
Duration of project	01.10.2024-30.09.2029
Head of project	dr Michał Karpiński
Description of project	The project concentrated on the study of quantum entanglement, one of the most profound and puzzling consequences of quantum mechanics. At the same time, it is the basis of most applications of quantum mechanics currently being developed within quantum technologies. Within this project, we will develop methods to stretch photons in time or frequency by more than 100 times, so as to enable the measurement and modification of pairs of photons entangled in time and frequency. As part of the project, we will develop elements that generate entangled pairs of photons and enable the measurement and use of this entanglement. We will explore the use of pairs of photons entangled in time and frequency to improve measurement sensitivity and secure information transfer. We will also explore the possibilities of using entanglement in time and frequency to speed up quantum computing.

Position details:

Position title	Assistant Professor (Post-doc, no teaching)
Organisational unit	Faculty of Physics
Employment group	Research Academics
Position profile ²	R2
Academic discipline ³	Physical Sciences
Number of positions	1
Form of employment and length of working time (proportionally to full-time employment)	Employment contract, 100% of full-time employment

¹ The nouns used in the announcement apply to people of all genders.

² Complete only in the case of competition for the position in the research employment group or the research and teaching employment group.

³ Complete only in the case of competition for the position in the research employment group or the research and teaching employment group.

Expected date of commencement of work and employment period	June 1 st , 2026 or later Up to 36 months
Remuneration	Basic remuneration of PLN 8987 gross/month plus the additional annual remuneration, an allowance for years of service and an additional remuneration of up to PLN 2509 gross/month depending on your experience and involvement. More information: link
Other working conditions	Workplace: Institute of Experimental Physics, Faculty of Physics of the University of Warsaw under the supervision of Dr. Michał Karpiński. Career opportunities: You will perform research tasks within the project, work with other team members, supervise students, write or contribute to writing of research publications and present research results at conferences and meetings. Depending on your expertise you will be involved either in theoretical aspects of the research project, or in experimental developments. More information: link
Basic responsibilities and obligations	<ul style="list-style-type: none"> - Performing research tasks within the project - Working with other team members - Supervising students - Writing or contributing to writing of research publications - Presenting research results at conferences and meetings - Depending on your expertise you will be involved either in theoretical aspects of the research project, or in experimental developments. <p>More information: link</p>
Conditions for entering the competition⁴	<ul style="list-style-type: none"> - Fulfilment of the requirements set out in Article 113 of the Law on Higher Education and Science (Journal of Laws of 2024, item 1571, consolidated text) - Having a doctoral degree or obtaining a doctoral degree before the starting work - Significant scientific achievements - Description of future research plans - International experience (eg. participation in conferences or scientific exchange programs) - Having research experience either in: <ul style="list-style-type: none"> • theoretical quantum optics or quantum information, or • classical photonic integrated circuit design and/or characterization, or • microwave electronics, or • experimental optics of relevance to the project. <p>The candidate must meet the conditions set by the National Science Center for people employed in a post-doc position. In particular, the person employed for this position must have a doctoral degree obtained no earlier than 7 years before the year of employment in the project. This period does not include breaks related to maternity leave, additional maternity leave, leave on the conditions of maternity leave, additional leave on the conditions of maternity leave, paternity leave, or parental leave granted on the terms specified in the provisions of the Labor Code or the receipt of sickness allowance or rehabilitation benefits in connection with incapacity for work, including those caused by diseases requiring medical rehabilitation. For women, the indicated 7-year period may be extended by 18 months for each child born or adopted. A woman can choose a more favourable way to indicate breaks in her scientific career.</p> <p>The employment will take place in accordance with the NCN regulations, in particular the employed person must meet the following conditions jointly:</p>

⁴ Required by the Act, the Law on Higher Education and Science, the Statute of the University of Warsaw, as well as necessary for the position.

	<ul style="list-style-type: none"> - the principal investigator was not a supervisor or assistant supervisor of her doctoral dissertation; - their PhD degree has been awarded by another institution than the one planned to employ them at this post or they have completed a continuous and evidenced post-doctoral fellowship of at least 10 months in another institution than the host institution for the project and in another country than the one in which they have been conferred a PhD degree; - at the time of receiving remuneration, they will not be receiving any other remuneration paid from the funds granted to research projects under NCN calls under the heading of direct costs; - in the period of receiving the remuneration they will be receiving no remuneration from another employer pursuant to an employment contract, including an employer with registered office outside of Poland; - during the period of receiving this remuneration, he will not receive retirement benefits from the social security system; - will be employed for at least 6 months.
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In addition, we expect ⁵	<ul style="list-style-type: none"> - Having a good command of the English language, written and spoken - Being motivated, independent in solving research problems, and eager to learn. <p>If hired, we expect the University of Warsaw to be the primary workplace for the successful candidate.</p>
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Criteria for the assessment of candidates in a competition	<p><u>Example criteria:</u></p> <ol style="list-style-type: none"> 1. Research experience either in: <ul style="list-style-type: none"> • theoretical quantum optics or quantum information, or • classical photonic integrated circuit design and/or characterization, or • microwave electronics, or • experimental optics of relevance to the project 2. Interest in the subject, motivation. 3. Command of the English language 4. Plan for your research development and publication strategy.
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Position ~~related~~/not related⁶ to activities covered by the protection of minors.

Competition rules:

Announcement reference number	WF-1210-45/2025
Keywords	quantum optics, quantum photonics, integrated optics
Deadline for submitting applications⁷	May 8th 2026
Method of submitting an application	Email to photon@fuw.edu.pl
Required documents	<ul style="list-style-type: none"> - Candidate's questionnaire link - Copy of doctoral diploma or document(s) confirming the prospect of obtaining a doctoral degree before starting employment, - List of publications with a single most important achievement highlighted, - List of at least 2 professors or senior faculty members familiar with the candidate's achievements who may be asked for reference letters (including contact details),

⁵ Additional conditions to be met; however, not meeting them will not lead to a negative formal assessment.

⁶ Delete as appropriate.

⁷ Not sooner than 30 days from the date of publication of the announcement.

	<ul style="list-style-type: none"> - Copies of other relevant documents confirming candidate's qualifications (optional). <p>Please ensure that your application is complete and submitted by the deadline indicated!</p>
<p>The competition is the first stage of the recruitment process, please read the Policy of Open, Transparent and Merit-Based Recruitment at the University of Warsaw link</p>	
Stages of competition	<p>The competition consists of the following stages:</p> <ul style="list-style-type: none"> - Stage I - formal evaluation of documents, - Stage II - substantive evaluation on the basis of submitted documents, - Stage III - interview with selected candidates , - Stage IV - final evaluation of competence, experience and scientific achievements, - Stage V - adjudication of the competition and announcement of results.
Anticipated date and method of notification of the competition outcomes	<p>The entire selection procedure will be concluded before 08.06.2026. Candidates will be individually notified of the results of this call by email.</p>
Contact for any questions relating to the competition	<p>photon@fuw.edu.pl with the announcement reference number</p> <p>Accessibility needs should be indicated on the Candidate's Questionnaire, in: Other relevant information from a candidate</p>

Employing faculty/unit:

Research profile of faculty /unit	https://www.fuw.edu.pl/
Teaching profile of faculty/ unit	https://www.fuw.edu.pl/
Other information	https://photon.fuw.edu.pl/

The University of Warsaw has implemented the procedure for whistleblowers reporting cases of law violation and for undertaking follow-up actions. For **more information** about this topic and the processing of candidates' personal data please follow the [link](#)

The University of Warsaw is a winner of the HR Excellence in Research award granted by the European Commission to institutions adhering to the European Charter for Researchers.

