JOB OFFER

Postdoctoral Researcher position in SONATA BIS project financed by the National Science Centre – 1 position (2 years)

Project title: "Mathematical Optimization in Quantum Information"

Project leader: dr Felix Huber

Institution: Institute of Informatics, Division of Quantum Information, University of Gdańsk, Gdańsk

Application deadline: 31.12.2025

Requirements:

1.PhD degree in mathematics, physics, or computer science, conferred within 7 years before joining the project (the extension may be applied according to the rules of the National Science Centre, Poland). A post-doc type post can be occupied by a person who has been conferred by another entity than University of Gdańsk or has completed a continuous and evidenced post-doctoral fellowship of at least 10 months in another entity than University of Gdańsk and in another country than the one in which they have been conferred a PhD degree.

2. Training or experience in the following areas: quantum information and computation, mathematical programming, combinatorial optimization, or coding theory;
3. Proficiency in English;
4. Programming experience (Python/Julia, Sagemath, GAP, semidefinite programming) is a plus;
5. Proactive with a good ability for cooperation, a methodological way of working.

Required documents:

All required documents should be prepared in English and sent to:

felix.huber[at]ug.edu.pl with subject: NCN Postdoc

1. Curriculum vitae with publication list (incl. direct article links to arxiv + journals);
2. Research statement on past and planned research;
3. Contact details of at least two researchers who can provide a reference for the candidate;
4. Documents confirming scientific degrees (for example, copy of diploma);
5. Copy or link to PhD thesis;
6. signed data processing GDPR statement (see last page).

Description of the tasks:

We are seeking a motivated postdoctoral researcher that is interested to work on quantum information and mathematical optimization in the group of Felix Huber (https://huberfe.github.io/).

Topics they can expect to work on are:

- approximation algorithms in QIT (e.g. ground state energies);
- symmetry- and size reduction of polynomial optimization problems;
- characterization of quantum codes and quantum capacities;
- characterization of quantum correlations, entanglement, nonlocality;
- machine learning for optimization problems.

The candidate as the key member of the project will conduct scientific research, contribute to writing publications, present obtained results at conferences and seminars, and co-supervise PhD or MSc students.

Recruitment process:

General rules of the recruitment process:

1. The recruitment procedure has two stages:

o Pre-selection candidates by the Selection Commission (SC), based on sent documents;

o Interview of pre-selected candidates by SC.

2. The decision will be made by the SC within 1 month from the date of recruitment completion.

2. Interview is planned for early January 2026.

4. 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. 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.

8. SC reserves the right to close the competition without selecting the candidate.

Job benefits:

1. Basic remuneration PLN gross monthly income 8500/8900 plus the additional annual remuneration, allowance for years of service;

- Starting date is negotiable, preferred 15.01.2026

- Period of employment: 2 years.

3. Scientific and organizational support;

4. Basic equipment and core facilities;

5. Funding for research trips and participation in international conferences;

6. Friendly, inspiring, interdisciplinary environment of the Institute of Informatics, International Centre for Theory of Quantum Technologies, and the Institute of Theoretical Physics and Astrophysics, at UG.

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Name and surname

I hereby give consent for the University of Gdansk to process my personal data as contained in application documents for the purposes of the competition process for the position of a Postdoctoral researcher offered by the Institute of Informatics of the University of Gdansk in accordance with the general regulation of 27 April 2016 on the protection of personal data.
Moreover, I declare that I have been informed as to the option of withdrawing my consent at any moment and that withdrawal shall not interfere with the legality of the processing conducted on the basis of my consent prior to the withdrawal.

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date and signature

In accordance with the general regulation of 27 April 2016 on the protection of personal data, hereinafter referred to as GDPR, we wish to inform you that:
1. The Administrator of your personal data is the University of Gdansk, with its seat at (80-309) Gdansk, ul. Jana Banking 8.
2. The Administrator has appointed a Data Protection Officer who may be contacted on the following telephone number: +48 58 523 31 30, +48 58 523 24 59 or e-mail address: iod@ug.edu.pl.
3. Your personal data shall be processed for the purposes of the recruitment process for the position of a PhD student offered by the Institute of Infromatics of the University of Gdansk.
4. The legal basis for processing your personal data for the purposes of recruitment shall be Article 6 Section 1 Point c of the GDPR, with processing being necessary for the fulfilment of a legal obligation to which the Administrator is subject, particularly Article 118a of the Law on Higher Education as well as Article 221 of the Labour Code. The condition legalising the processing of personal data provided voluntarily by the candidate, which is beyond the scope of data referred to in Article 221 of the Labour Code, shall be Article 6 Section 1 Point a of the GDPR – consent by the data subject.
5. Providing your personal data, subsequent to the decision to enter the recruitment process, is obligatory within the scope defined by Article 221 of the Labour Code and the Law on Higher Education and determines the possibility of applying for work as well as possible further employment. In the case of personal data which is beyond the scope of the aforementioned legal regulations, providing your data is voluntary but it does determine the possibility of participating in the recruitment process.
6. Your personal data shall be processed on behalf of the data administrator by authorised personnel purely for the purposes referred to in Point 3.
7. Your personal data shall be stored for a period of time necessary for the fulfilment of the aims referred to in Point 3. Should the recruitment outcome prove negative, your data shall be removed immediately at the completion of recruitment, unless otherwise provided by the record-keeping regulations – then for a period of time specified in these regulations.
8. Your personal data shall not be shared with external entities with the exception of cases provided for by legal regulations. Should you submit your application documents in electronic form, the recipient of your data may be an entity acting on behalf of the administrator i.e. a mail service operator.
9. Under the terms of the GDPR, you shall be entitled to:
a. the right to access your data,
b. the right to rectify it if factually incorrect,
c. the right to remove or restrict the processing of the data as well as the right to data portability – in cases prescribed by the law,
d. the right to object to the processing of the data,
e. the right to file a complaint with the supervisory authority – the President of the Personal Data Protection Office, should you consider that the processing of your personal data violates personal data protection regulations.

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date and signature