

## JOB OFFER

Position in the project:	Postdoctoral researcher
Scientific discipline:	Physics
Job type (employment contract/stipend):	Full-time employment
Number of job offers:	2
Remuneration/stipend amount/ month ("X0 000 PLN of full remuneration cost, i.e. expected net salary at X 000 PLN"):	gross salaries: ~11'500 PLN (senior postdoc) ~ 7'600 PLN (junior postdoc)
Position starts on:	4 January 2021 or later
Maximum period of contract/stipend agreement:	33 months
Institution:	Jagiellonian University
Project leader:	Prof. dr hab. Karol Życzkowski / Group leader: dr Felix Huber
Project title:	<i>Near-term quantum computers, optimal implementations and applications</i>  <b>Project is carried out within the TEAM-NET programme of the Foundation for Polish Science</b>
Project description:	The researcher will work in quantum information; including near-term quantum error correction and fault-tolerance, foundations of quantum codes, entanglement theory, and mathematical physics. More specifically, we will work on topics related to <ul style="list-style-type: none"><li>- practical quantum error-correcting codes and fault-tolerant schemes for higher spin systems and their experimental implementation</li><li>- the limitations on quantum error correction and on the</li></ul>

	<p>distribution of quantum correlations.</p> <ul style="list-style-type: none"> <li>- methods for the optimization of non-commutative polynomials with tensor structure</li> <li>- numerical techniques to design experimentally feasible quantum codes.</li> <li>- invariant methods for entanglement detection</li> </ul>
Profile of candidates/requirements:	<ul style="list-style-type: none"> <li>- PhD degree in Physics or Mathematics with proven track record (publications/talks)</li> <li>- Expert knowledge of quantum physics and quantum information or mathematical physics, strong mathematical background.</li> <li>- Ability work in teams and to participate in supervising PhD and MSc students.</li> <li>- Junior Postdoc: up to 5 years after PhD; senior Postdoc: up to 6-9 years after PhD</li> </ul>
Required documents:	<p>Applications (including curriculum vitae, a scan of the university diploma, an electronic copy or link to the applicants PhD thesis, and the contact details of at least two senior researchers who can provide references) should be sent to <a href="mailto:felix.huber@physik.uni-siegen.de">felix.huber@physik.uni-siegen.de</a> with subject "KrakowPostdoc". The candidate is expected to ask the reference letters to be emailed directly to <a href="mailto:felix.huber@physik.uni-siegen.de">felix.huber@physik.uni-siegen.de</a> before the deadline.</p>
We offer:	<ul style="list-style-type: none"> <li>- Full time employment for 33 months (1 Jan 2021 – 30 Sept 2023), monthly gross salaries ~11'500 PLN (senior postdoc) / ~7'600 PLN (junior postdoc)</li> <li>- Scientific and organizational support, travel funds.</li> </ul>
Please submit the following documents to:	<p><a href="mailto:felix.huber@physik.uni-siegen.de">felix.huber@physik.uni-siegen.de</a></p>
Application deadline:	<p>Applications will be reviewed starting from <b>9 November 2020</b> until the positions are filled.</p>
Euraxess job/stipend offer (in case of PhD, postdoc, leader and young leader positions):	<p><a href="https://euraxess.ec.europa.eu/jobs/565584">https://euraxess.ec.europa.eu/jobs/565584</a></p>

Due to the entry into force of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016, we also require that your job advertisements include a clause requesting the candidate's consent to the processing of his or her personal data by the institution which carries out the recruitment process.