JOB OFFER

Position in the project:	PhD student
Scientific discipline:	Physics
Job type (employment contract/stipend):	Employment contract
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 salary ~6100 PLN / month
Position starts on:	4 January 2021
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:	*Near-term quantum computers, optimal implementations and applications* ***Project is carried out within the TEAM-NET programme of the Foundation for Polish Science***
Project description:	The doctoral project will be 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 - practical quantum error-correcting codes and fault-tolerant schemes for higher spin systems and their experimental implementation

	- the limitations on quantum error correction and on the distribution of quantum correlations. - methods for the optimization of non-commutative polynomials with tensor structure - numerical techniques to design experimentally feasible quantum codes. - invariant methods for entanglement detection
Profile of candidates/requirements:	- MSc degree in Physics or Mathematics. - Good knowledge quantum physics and quantum information, strong mathematical background. - Ability to communicate clearly (fluent spoken and written English) and to work in teams. - Enthusiasm and high frustration tolerance - Research (publications, talks) and programming experience is desired.
Required documents:	Applications (including curriculum vitae, a scan of the university diploma, an electronic copy or link to the applicants Master thesis, and the contact details of at least one senior researcher who can provide references) should be sent to felix.huber@physik.uni-siegen.de with subject “KrakowPhD”. The candidate is expected to ask the reference letters to be emailed directly to felix.huber@physik.uni-siegen.de before the deadline.
We offer:	- Full time employment for 33 months (1 Jan 2021 – 30 Sept 2023), monthly gross salary 6100 PLN - Scientific and organizational support, travel funds.
Please submit the documents to:	felix.huber@physik-uni-siegen.de
Application deadline:	Applications will be reviewed starting from **9 November 2020** until the positions are filled.
Euraxess job/stipend offer (in case of PhD, postdoc, leader and young leader positions):	https://euraxess.ec.europa.eu/jobs/565576

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.