

Open PhD and Postdoc Positions in Photonic Quantum Technology at Humboldt-University Berlin



We are looking for highly motivated, enthusiastic, and team-oriented candidates for several new projects concerning experimental photonic quantum information processing.

Job description

- construction, test and chip-integration of photon pair and entangled photon sources based on spontaneous parametric down-conversion at 1550nm for use in quantum networks and for photonic quantum computing
- generation of novel photonic quantum states (cluster states, GKP states) and evaluation of their prospect for photonic quantum computing
- investigation of quantum memories in atomic vapor cells and development of concepts for their integration in fiber-based quantum networks
- modular integration of sources, frequency-converters, and memories for scalable processing platforms and quantum networks

Your profile

- completed university degree in physics, quantum information or related field
- previous knowledge of experimental quantum optics
- the ability to work in a structured and independent manner
- excellent problem-solving skills
- excellent team and communication skills
- excellent language skills in German or English

Additional requirements for postdoc:

- doctorate in physics, quantum information or related field
- expertise in experimental quantum optics/photonics, photon emitters, quantum memories
- excellent organizational skills
- experience in supervision of students

We offer

- exciting work environment on an attractive research campus
- stimulating exchange within a larger research consortium
- participation in conferences and international exchange
- three years contract with 75% of salary grade E 13 TV-L HU (PhD candidates); two years contract (extension option after 2 years) with 100% of salary grade E 13 TV-L HU

Contact

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<https://www.physik.hu-berlin.de/de/nano>