



FORTH

FOUNDATION FOR RESEARCH AND TECHNOLOGY – HELLAS
INSTITUTE OF ELECTRONIC STRUCTURE AND LASER

Postdoctoral Associate – Institute of Electronic Structure and Laser, FORTH

We invite applications for a postdoctoral associate position in theoretical Quantum Information Science in the Foundation of Research and Technology (FORTH) in Crete, Greece.

The focus of this position will be on the design of protocols for quantum repeater networks based on quantum dot spins, including the generation of all-photonic graph/cluster states from emitters and the quantum control of the quantum dot spin-photon interface.

The successful candidate will have plenty of opportunities for collaboration with members of the Economou group and with some of the leading experimental groups in Europe. There will also be opportunities for travel (once scientific travel is restored and safe) to present in conferences and to collaborate with other groups.

To apply email the following materials (i) CV, (ii) cover letter, (iii) brief research statement to Prof. Sophia Economou (economou@vt.edu) and arrange to have 3 recommendation letters emailed to the same address.



Department of Physics
850 W. Campus dr.
Blacksburg, Virginia 24061
economou@vt.edu

Opening: Ph.D. student – Physics

We invite applications for a Ph.D. student position in theoretical Quantum Information Science in the Physics Department of Virginia Tech.

The focus of the research will be on one of the following topics: (i) the development and benchmarking of quantum simulation and optimization algorithms, with the opportunity to test these theoretical results on cloud quantum processors (Virginia Tech is in IBM’s Q Hub, which provides access to 20+ qubit devices) and (ii) the design of protocols for quantum repeater networks, including the generation of all-photon graph/cluster states from emitters and the quantum control of quantum memories and spin-photon interfaces.

The successful candidates will join a vibrant research environment in the quantum information group at Virginia Tech. There will be plenty of opportunities for collaboration with other members of the group and with some of the leading experimental and theory groups around the world. Our group is part of the newly established DOE Quantum Center “Codesign for quantum advantage”. The Ph.D. student will also have opportunities for travel (once scientific travel is restored and safe) to present in conferences and to collaborate with other groups.

To apply visit <https://applyto.graduateschool.vt.edu/apply/> and contact Prof. Sophia Economou (economou@vt.edu) with any inquiries.



Department of Physics
850 W. Campus dr.
Blacksburg, Virginia 24061
economou@vt.edu

Research Associate/Postdoctoral Associate – Physics, Virginia Tech

We invite applications for research associate or postdoctoral associate positions in theoretical Quantum Information Science in the Physics Department of Virginia Tech.

The focus of these positions will be on (i) the development and benchmarking of quantum simulation and optimization algorithms, with the opportunity to test these theoretical results on cloud quantum processors (Virginia Tech is in IBM's Q Hub, which provides access to 20+ qubit devices) and (ii) the design of protocols for quantum repeater networks, including the generation of all-photon graph/cluster states from emitters and the quantum control of quantum memories and spin-photon interfaces.

The successful candidates will join a vibrant research environment in the quantum information group at Virginia Tech. There will be plenty of opportunities for collaboration with other members of the group and with some of the leading experimental and theory groups around the world. Our group is part of the newly established DOE Quantum Center "Codesign for quantum advantage". The Postdoctoral and Research Associate positions will also involve opportunities for travel (once scientific travel is restored and safe) to present in conferences and to collaborate with other groups.

To apply email the following materials (i) CV, (ii) cover letter, (iii) brief research statement to Prof. Sophia Economou (economou@vt.edu) and arrange to have 3 recommendation letters emailed to the same address.