

PhD projects in “quantum physics and quantum simulations” in CQT Singapore

The positions are within the Quantum Optics and Quantum Simulators Group lead by Dr. Dimitris G. Angelakis in the Centre of Quantum Technologies (CQT) (<http://www.quantumlah.org>). The group's research interests span most aspects of **theoretical quantum physics and its applications in implementing quantum computation and quantum simulations**.

PhD projects will involve the study of quantum optical systems such superconducting qubits, slow light systems, quantum nano-photonic arrays for building quantum simulators and quantum computers.

The candidates should have a solid undergraduate background in Physics and ideally have some knowledge of quantum optics and basic aspects of quantum information/condensed matter. They should be within the top 10% of students in their year. A strong background in quantum physics and in using numerics for simulating physical problems will be a plus as also participation in international competitions such as Math or Physics Olympiad for example. Exposure in Atomic, Molecular, Optical physics and/or quantum information at the level of an MSc course is also an advantage.

The current group consists of one postdoc three PhD students. We are in close contact with other theory and experimental groups in CQT and have ongoing strong collaboration with leading experimental and theory groups in Europe and the US. These PhD positions will be CQT based with opportunities to visit the corresponding collaborators' groups. The positions are fully funded and include travel funds and funds for buying a computer and books.

The positions are available as soon as possible and we accept applications until a suitable candidate is found. Applications should be sent by email to dimitris.angelakis-at-gmail.com. They should contain a detailed CV, a one page motivation letter and the contact details (email) of three referees.

Group homepage: www.dimitrisangelakis.org