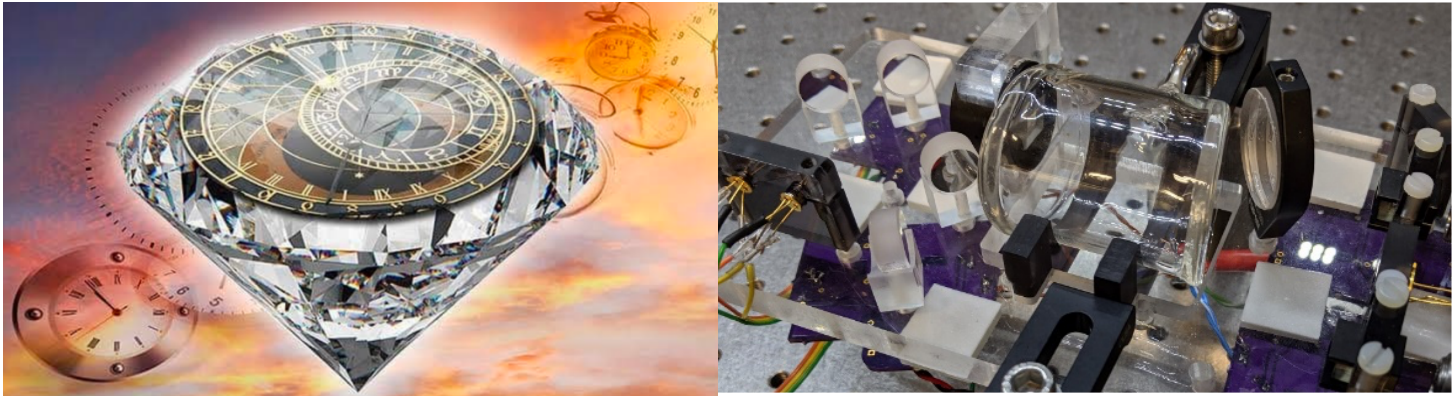


# Two High-Value PhD Positions in Experimental Quantum Technologies

University of Adelaide/ Defence Science and Technology Group



**\$40k p.a. scholarship along with generous international and domestic travel and project support.**

The University of Adelaide and Defence Science and Technology (DST) group have identified a growing global demand for researchers with skills and experience in quantum technologies. Thus, we have come together to create two PhD scholarships that can immediately benefit from recent advances in experimental quantum physics:

**(A) Portable Atomic Clocks**                      and                      **(B) Quantum Magnetometry**

The University of Adelaide team has a long history of “firsts” in these fields and now seeks to appoint two high-performing individuals to undertake projects at the leading edge of these fields. In both projects you will work closely with an outstanding team of researchers at Adelaide, but equally importantly, you will be part of a national Quantum Network of other PhD students who are working in quantum technologies. Through these projects you will meet frequently with this broader team and also meet with students studying similar fields in other countries. This represents a unique opportunity to develop an international network of colleagues working on world-class research.

The goal of both projects is to develop a world-class instrument –a device that has a performance that goes beyond that demonstrated elsewhere. This will require high-level creative and technical skills to make the breakthroughs that are necessary to access this next generation of performance. It is very likely that both projects will also require a mix of experimental and theoretical work – the balance between these can be adjusted to the skills and interest of the student.

## Ideal candidate

- A driven individual who wants to build a world-class instrument: you must have the persistence, work-ethic and inspiration to overcome the challenges that you will encounter;
- A background in experimental physics or electronics engineering or similar
- A familiarity, or willingness to be familiar with optics, photonics, electronics, computer control and vacuum
- Good results in your undergraduate study as well as a high-quality Honours or Masters project.
- A willingness to travel as it is likely that your apparatus will be deployed in a real-world context
- Good interpersonal skills as you will be part of two big teams: your home team at the University of Adelaide as well as the Quantum Network at DST Group (with connections to numerous students at other Universities in Australia and elsewhere).

## Applications

This position is only open to Australian citizens. You should express your interest before December 10, 2019.

For any further queries, or to express your interest, please contact Professor Andre Luiten [andre.luiten@adelaide.edu.au](mailto:andre.luiten@adelaide.edu.au), +61 404 817 168