



**MEDIA ALERT**

**JULY 19, 2004**

## **Quantum Optics – What is it?**

### **July 20 Launch of the Book, “A Guide to Experiments in Quantum Optics”**

The first edition of the book “A Guide to Experiments in Quantum Optics” sold out quickly around the world. The Australian authors, Professor Hans-A Bacher and Associate Professor Timothy C Ralph, have written a second, enlarged edition to keep pace with the rapid development and interest in this field.

Their book will be launched at the Australian Research Council Centre of Excellence for Quantum-Atom Optics (ACQAO), Physics Building (Building 38) on Tuesday, July 20 at 4.30pm at The Australian National University.

Technology evolves rapidly — for example mobile phones, and DVDs which were not available 20 years ago, are now common.

In our quest for smaller, faster and more powerful devices, we are now reaching fundamental limitations, which call for physics solutions.

“The research in Quantum Optics provides us with some weird and interesting ideas, however it will eventually lead to new practical technology. Engineers and consumers will use these quantum optics ideas”, says Professor Bacher.

“The quest for communicating and storing quantum information, for quantum logic and quantum computing by optical means is a major driving force behind this popularity”, he added.

Professor Bacher’s personal reputation for scientific excellence and achievement played a major role in attracting \$12m funding to create the Australian Centre for Quantum-Atom Optics (ACQAO) at ANU last year. He was also awarded a prestigious Federation Fellowship and is currently the Research Director of ACQAO.

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Associate Professor Ralph graduated from Macquarie University and received his PhD from The Australian National University. He is presently a Queen Elizabeth II Fellow at The University of Queensland in Brisbane. He is also the Queensland Node Manager of the Australian Centre of Excellence for Quantum Computer Technology.

Both authors will be available to explain just what Quantum Optics is and how physics has touched our lives in the past and may do so in the future.

**For further information please contact:**

**Ruth E Wilson (02) 6125 4203 or 0418 967473**

**[www.acqao.org](http://www.acqao.org)**

***Drinks & Nibbles provided at the Launch.***