



“Computing with Light”

by

Andrew White
University of Queensland



This talk, aimed at school teachers & their students, explains developments in quantum computing. Quantum computers could solve problems impossible with conventional computers, such as cracking codes or modelling complex molecules. In the everyday world, objects are either here or there. Current computers are based on this premise, with bits that were either on or off. However, in quantum mechanics things are different. Objects can be in two places or 'states' at once. This is famously illustrated by Schrödinger's cat, which can be simultaneously alive and dead (and presumably somewhat confused by it all). Similarly, quantum bits - qubits - which carry information can simultaneously be on and off.

Andrew White is a Professor in the University of Queensland's School of Physical Sciences and an Australian Research Council Federation Fellow.

This presentation is free and welcomes all interested persons. It forms part of the AIP Queensland Research Seminar Series for 2007, showcasing physics research at Queensland universities.

VENUE: Room 222 Parnell (Physics) building, University of Queensland St Lucia campus

DATE: Friday 12 October 2007

TIME: 4pm

More information: Dr Kevin Pimbblet pimbblet@physics.uq.edu.au ph (07) 3346 9037