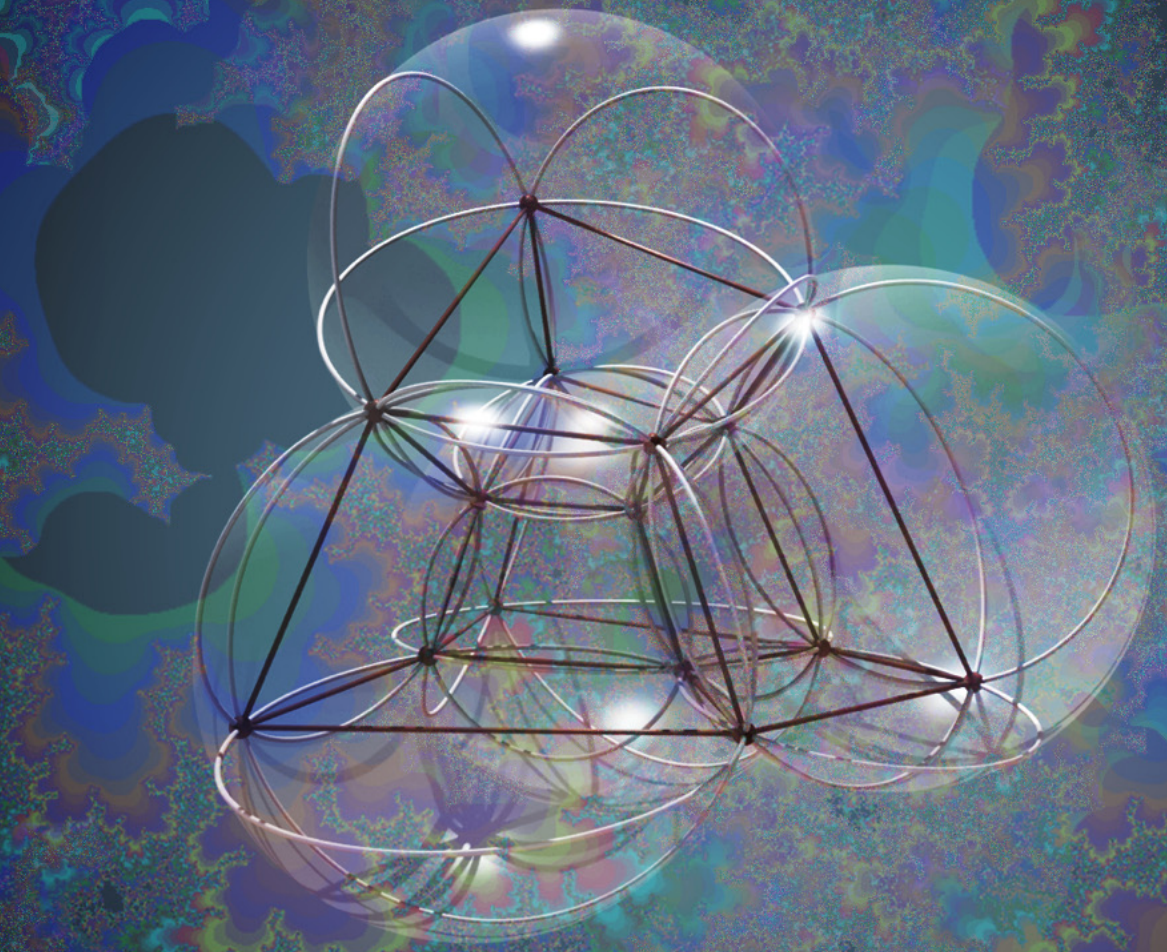
23rd Canberra International Physics Summer School

Frontiers in Physics

Research School of Physics and Engineering
ANU College of Physical and Mathematical Sciences

1-5 December 2014

Australian National University



Keynote speakers to include:

Brian Schmidt

Steven Chu

The purpose of this Summer School is to introduce students to a number of fundamental ideas and concepts, which play key roles in the foundation of modern physics and are likely to govern the development of new technologies and applications in the 21st century. The target audience is undergraduate and graduate students from across Australia and New Zealand. The plan is to cover a few current research topics in physics, explaining both fundamental theoretical concepts and prospective applications:

- Quantum Many body systems: *Miracles of heavy-ion fusion.*
- Quantum entanglement: *Reality or Paradox?*
- Nanomaterials: *Why does the matter behave differently at nanoscales?*
- Mathematical physics: *"Monster waves" behind mathematical equations*
- Non-linear physics: *Changing the colour of light*
- Fusion Plasma physics: *Creating a star on Earth*

In addition to the regular lectures there will be a few keynote lectures by distinguished speakers on topics of general importance in physics and science. Physics lab tours will also be organised.

Student travel & living scholarships are available, see:

cpss.anu.edu.au/2014