

# DARK 2009

Physics and Astronomy, University of Canterbury, New Zealand

The Heidelberg International Conference on Dark Matter in Astro and Particle Physics" is a well-established usually biennial conference that brings together scientists working in the fields of cosmology, astrophysics, particle, and nuclear physics. The aim of the conference is to discuss the nature and origin of dark matter and dark energy in our Universe.

The first three conferences took place in 1996, 1998 and 2000 in Heidelberg (Germany) which gave the conference its name and fame. DARK 2007 was the third meeting within this series outside Europe, after DARK 2002 - in Cape Town, South Africa, and Dark 2004 in Texas, USA.

DARK 2009 will take place in the Department of Physics and Astronomy, University of Canterbury, Christchurch, New Zealand. Arrival date is 18th January 2009 and departure date is the 24 January 2009.

## MAJOR CONFERENCE TOPICS

1. Evidence, status, and perspectives of direct dark matter searches
2. Cosmological parameters from cosmic microwave background, Supernovae 1a and large scale structure
3. Dark matter in galaxies and clusters of galaxies
4. Gravitational lensing, microlensing, and dark matter
5. Cosmic clocks, cosmic variance and cosmic averages
6. Gravitational energy and cosmic acceleration
7. Local fermionic dark matter with mass dimension one
8. Structure on large and subgalactic scales and properties of dark matter
9. Dark matter candidates beyond the standard model
10. Direct and Indirect WIMP searches
11. Axion dark matter theory and searches
12. Supermassive compact dark objects at the galactic centers
13. Antimatter search
14. Dark energy

## APPLICATION PROCEDURE

Full registration is now open. If you wish to participate in DARK 2009, please contact [Rosalie Reilly](mailto:rosalie.reilly@canterbury.ac.nz) on [rosalie.reilly@canterbury.ac.nz](mailto:rosalie.reilly@canterbury.ac.nz)