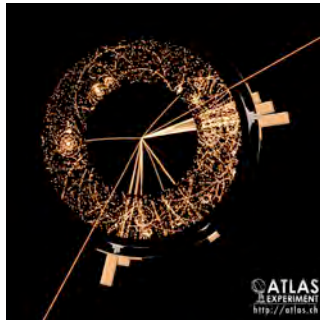


Winter Public Lecture Series in Physics  
in honour of Alexander and Leicester McAulay

## Unravelling the mysteries



of the universe with  
the Large Hadron Collider

Dr Martin White  
University of Melbourne

Wednesday, 10 August 2011, 8 PM  
Physics Lecture Theatre 1, Sandy Bay Campus, University of Tasmania

### ABSTRACT:

What is the world made of and how did it come to be? These questions have vexed mankind for thousands of years, driving us to ever greater feats of exploration and discovery. The biggest experiment on the planet is the Large Hadron Collider (LHC) at CERN in Geneva, a giant proton smasher that recreates the conditions just after the big bang in order to obtain answers of unprecedented detail and scope. Dr Martin White will explain what we know and what we don't know about the universe, how the LHC will help us understand more and why the next ten years will be the most exciting period physics has ever known. Expect to meet extra space dimensions, a strange field that gives us mass, and mysterious forms of matter and energy that will completely reverse your perspective of what you are looking at in the night sky.

### SPEAKER PROFILE:

Dr Martin White completed his PhD at the University of Cambridge in 2006 before spending the next few years flying between Cambridge and CERN as a member of the ATLAS experiment at the Large Hadron Collider. He is currently a Research Fellow at the University of Melbourne where he is busy searching for new particles in the LHC data and working with theorists and astrophysicists on how to unravel the mystery of dark matter. He has given lectures around the world on particle physics and cosmology, including sharing a festival bill with the Pet Shop Boys and Grace Jones. He is married and can be found playing in an indie pop band in Scandinavia when not in Melbourne or CERN.

This is the third lecture in this year's Winter Public Lecture Series in Physics. The series started in 2002 and is held in honour of Alexander and Leicester McAulay, two renowned Physics professors, who were inspiring teachers and did significant research at the University of Tasmania during the early years.

**ALL WELCOME**