### **IESIS**



The second public meeting of 2013-2014 session

## The MacMillan Lecture

Joint lecture with WES (Women's Engineering Society)

# 'God Particle or God-damn Particle? Work at the Hadron Collider'

by

# **Victoria Martin**

### **Synopsis**

The Large Hadron Collider (LHC) at CERN in Geneva is the largest scientific instrument ever built. It collides protons at extremely high energies in order to recreate the conditions that were present in the first billionth of a second after the big bang. Last year, by examining data from these collisions, physicists from the ATLAS and CMS experiments at CERN finally announced the discovery of the "God particle", better known to scientists as the Higgs boson, just 49 years after it was first predicted by University of Edinburgh physicist Peter Higgs.

Ms Martin will introduce the LHC, the Higgs boson and the ATLAS experiment and outline progress into understanding the fundamental physics of the universe.

#### Author

Dr Victoria Martin is reader of particle physics at the University of Edinburgh. Victoria studied physics at University of Edinburgh obtaining a BSc(Hons) in Mathematical Physics in 1996 and a PhD in experimental particle physics in 2000. In 2000 Victoria moved to the USA, to work as a particle physics researcher at Northwestern University near Chicago, before returning to the University of Edinburgh in 2005. Victoria's current research interests are Higgs boson physics at particle colliders. Victoria co-leads a team of researchers at the University working on the ATLAS experiment at the Large Hadron Collider, studying the newly-discovered Higgs boson.

Tuesday, 1st October 2013, 5.30pm for 6.15pm

Trust Hall, Clydeport Building

Admission free Visitors welcome

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