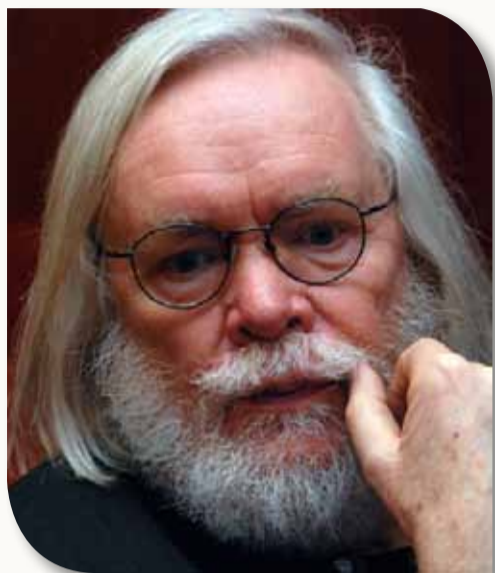




Institute of Advanced Studies



## “The Large Hadron Collider: Answering Gauguin’s questions about the Universe”

**Professor John Ellis FRS**  
*CERN*

### About The Talk

In a famous painting, Gauguin showed people asking 3 basic questions: What are we? Where do we come from? Where are we going? In the language of physics, these become: What is the structure of matter? How did the Universe evolve? How will it evolve in the future? Experiments with the Large Hadron Collider at CERN are addressing these questions, and this talk will review the prospects for finding answers.

### About The Speaker

**Professor John Ellis FRS** is a British theoretical physicist whose research interests focus on the phenomenological aspects of particle physics. He has also made important contributions to astrophysics, cosmology and quantum gravity.

In 1976, working with Dimitri Nanopoulos and Mary Gaillard, Prof Ellis proposed the so-called *Higgs-strahlung* process in which a Higgs boson is radiated from a Z-boson. This has proven to be the best way to search for the Higgs boson at LEP. In the same year, he has also estimated the direct CP-violation contribution to rare neutral kaon decays, which eventually led to the success of the NA31 and NA48 experiments at CERN.

Prof Ellis' activities at CERN are wide-ranging and he was a founding member of the LEP and LHCC. He currently chairs the committee to investigate physics opportunities for future proton accelerators. Prof Ellis is also a member of the extended CLIC (Compact Linear Collider) Steering Committee.

Prof Ellis was awarded the **Maxwell Medal in 1982**, and the **Paul Dirac Prize in 2005** by the Institute of Physics. He is also an Elected Fellow of the Royal Society of London since 1985 and of the Institute of Physics since 1991.

19 January 2012 (Thursday) • 6pm to 7pm  
Auditorium, Nanyang Executive Centre, NTU

Admission is free. Please register online at <http://www.ntu.edu.sg/ias/ptreg>

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