



CERN Colloquium

SPEAKER: Dr. Peter STOTT (Head, Climate Monitoring and Attribution, Met Office Hadley Centre)

TITLE: **Detection and Attribution of Climate Change : From global mean temperature change to climate extremes and high impact weather.**

DATE: Thu 31/10/2013 16:30

PLACE: Council Chamber

ABSTRACT

This talk will describe how evidence has grown in recent years for a human influence on climate and explain how the Fifth Assessment Report of the Intergovernmental Panel on Climate Change concluded that it is extremely likely (>95% probability) that human influence on climate has been the dominant cause of the observed global-mean warming since the mid-20th century. The fingerprint of human activities has also been detected in warming of the ocean, in changes in the global water cycle, in reductions in snow and ice, and in changes in some climate extremes.

The strengthening of evidence for the effects of human influence on climate extremes is in line with long-held basic understanding of the consequences of mean warming for temperature extremes and for atmospheric moisture. Despite such compelling evidence this does not mean that every instance of high impact weather can be attributed to anthropogenic climate change, because climate variability is often a major factor in many locations, especially for rainfall. The talk will describe a new report that seeks to explain recent extreme weather and climate events from a climate perspective and will provide some illustrations of high impact weather taken from the report.

Organised by: Ignatios Antoniadis/PH-TH**Tea
and coffee will be served at 16h00**