



## **51<sup>st</sup> CMOS Congress Public Lecture**

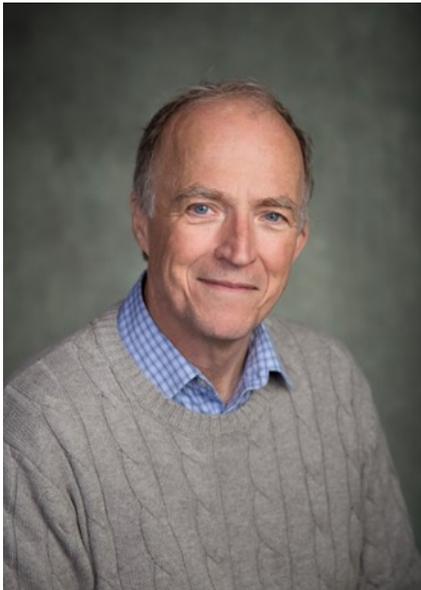
**Tuesday, June 6, 2017 6-7:30 pm Hilton Toronto Downtown**

**Changing weather extremes - why it isn't an "alternative fact"**

**Francis Zwiers**

**Pacific Climate Impacts Consortium, University of Victoria**

This presentation is free for the public to attend but registration is required through Eventbrite (<http://bit.ly/2q1G1TM>). A ticket is provided to Congress registrants.



Dr. Francis Zwiers is director of the Pacific Climate Impacts Consortium (PCIC) at the University of Victoria. His former roles include chief of the Canadian Centre for Climate Modelling and Analysis and director of the Climate Research Division, both at Environment and Climate Change Canada. As a research scientist, his expertise is in the application of statistical methods to the analysis of observed and simulated climate variability and change. Dr. Zwiers is an Honorary Research Professor at the University of Victoria, a Fellow of the Royal Society of Canada and of the American Meteorological Society, a recipient of the Patterson Medal and the President's Prize, has served as an IPCC Coordinating Lead Author of the Fourth Assessment Report and as an elected member of the IPCC Bureau for the Fifth Assessment Report.

## The Presentation

Stories about extreme weather and climate events around the world often make media front-page headlines, alongside the recent upswing in “alternative fact”, or fake, news. These stories about extremes draw our attention because of their immediacy and the devastating impacts, which often include deaths and up to billions of dollars in damage.

Two Canadian examples include the Fort McMurray wildfire (2016, >\$3.6B in insured losses) or the Calgary floods (2013, \$6.7B USD in total losses). In the aftermath of such devastation, media ask whether such extreme events are now more frequent or intense than in the past, whether they are caused by human influence on the climate and if they represent a harbinger of the future.

In most cases, climate science does find that human influence played a role, consistent with the overwhelming body of evidence indicating a human contribution to the observed changes in average climatic conditions over the past century.

Nevertheless, at a localized level, the effects of climate change can be hard to detect, leading to possible discrepancies between our own personal experience of climate change and the findings of climate science. In this new era of “alternative facts”, it would be a fallacy to rely solely on personal experience, reject the findings of the climate science community and consequently fail to prepare for the climatic changes ahead.