



The McGill-Montreal Chapter

Sigma Xi :: The Scientific Research Society ::



Dr. Ronald Stewart

Professor
Dept. of Atmospheric
and Oceanic Sciences

514-398-1380
ronald.stewart@mcgill.ca

PUBLIC LECTURE

when:

Monday
27 November 2006
6:00 P.M.

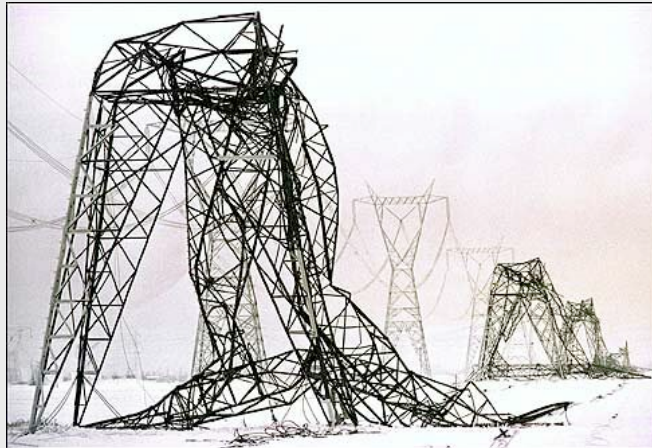
where:

McGill University
Otto Maass Chemistry
room 10



Our Winter Storms: The Science Of Their Precipitation

Winter storms are a common feature of our Canadian climate. Remember The Ice Storm? Even though we are all familiar with these storms, there are still many scientific questions associated with them. Many of these issues, as well as the impacts of the storms, are linked with precipitation that can fall as a single type (including snow, rain, freezing rain, wet snow, slush, and snow pellets) or a combination of these types. To address this winter precipitation, one needs to understand its detailed nature and the factors controlling its spatial and temporal distribution. This means that one has to consider, for example, the physical processes governing the nucleation of precipitation in the atmosphere; the growth of the resultant particles; their potential phase changes including heat and moisture exchanges with the environment; the storm structure leading to the antecedent conditions for precipitation; and the modification of that storm structure by the precipitation. With winter approaching, the audience should soon be able to carry out their own observations of winter precipitation.



Prof. Stewart is a professor at McGill's Atmospheric and Oceanic Sciences Department where he studies Extreme Weather including winter, mountain and Arctic storms as well as drought. His primary research interest is to better understand the fine scale structures of such storms and their precipitation, but he also researches the catastrophic precipitation that sometimes occurs around drought regions and/or ends drought. He carries out field studies examining the detailed nature of winter precipitation in the Montreal area; he has carried out and is carrying out other projects across the country including the Arctic in which he flies through storms in instrumented aircraft.



english



français

Council Meeting
Ruttan Room **4:30 P.M.**

Member's Reception
Ruttan Room, **5:30 P.M.**