

# John Fyfe



I am a **Research Scientist** with the Canadian Centre for Climate Modeling and Analysis (CCCma) in Victoria. I was born in Regina Saskatchewan where I completed my bachelor degree in mathematics at the University of Regina.

On behalf of Environment Canada, and in collaboration with colleagues, I conduct research in climate modeling, variability and predictability. **The overall Purpose of the research is to understand atmospheric and oceanic changes that have occurred in the past, and to predict changes that might occur in the future under global warming. The results of this research appear in scholarly journals, and are routinely presented at international conferences attended by other climate researchers. Ultimately, the research is communicated to government policy makers concerned with effects of humans on the temperature and composition of the Earth's atmosphere and oceans.**

## education

As a summer student in the Mathematical Sciences Applications Group I developed an interest in mathematical modeling, which ultimately led to a doctoral degree in Meteorology from McGill University. From McGill I went to Princeton University as a Postdoctoral Fellow, and then to the University of British Columbia as an Assistant Professor in Oceanography.

**My main hobbies are trying to tear myself away from the work that I love, cutting down on work-related travel and trying to keep up with my wife's marathon training and daughter's swim meets.**

At the CCCma, we conduct research in coupled ocean and atmosphere climate modeling, climate variability and predictability, and a number of other areas. My own work with graduate students, postdoctoral fellows, CCCma scientists, and other scientists from around the world frequently involves mathematical principles and tools that I acquired as an undergraduate student in Mathematics.

I use the principles and tools from mathematics and statistics on a daily basis in my work. Many of these tools I have obtained as an undergraduate in mathematics, while others I have garnered at various points in my career on an "as need" basis. In recent years I have taken a keen interest in the analysis of nonlinear structure in climate data, and to this end have been developing, with graduate students and others, new mathematical and statistical techniques. Mathematics and statistics are essential in my area of research.