Post-doctoral position in Climate Change modeling

LAMPS and Department of Mathematics and Statistics, York University

A post-doctoral position is available immediately in the Department of Mathematics and Statistics at York University to work on Developing High-Resolution (45kmX45km) Probabilistic Climate Projections of extreme events over Ontario based on NARCCAP RCM and IPCC GCM results.

Job function and duties: The main job function is to assess the possible changes in extreme climate and weather conditions as a consequence of climate change. This involves investigating and developing tools to use the relationship between local extremes and large-scale climatic fields, which are projected in climate scenario simulations for the future. Climate change probabilistic analysis is based on the RCMs and GCMs output from the North American Regional Climate Change Assessment Program (NARCCAP). Participating in research development with internal and external collaborators across disciplines; communicating research results through publication in peer-reviewed journals and presentations at scientific meetings.

Job requirements: (a) Education and Experience: Ph.D. in atmospheric sciences/climatology or related sciences; including course work in advanced statistics, multivariate statistics, advanced regression methods and/or Bayesian analysis; or Ph.D. in applied statistics with some courses background of atmospheric sciences or climatology or related sciences. (b) Knowledge, Skills and Abilities: Strong quantitative skills; Knowledge of synoptic dynamics; In-depth knowledge of climate processes and dynamics with particular knowledge of climate of North America; Experience in analyzing climate model results; Demonstrated record of research and publication; Ability to participate in and interact productively with climate modeling research groups, statisticians and climate dynamists at NCAR and among the project partners; Familiarity with UNIX and data analysis software, NCL, R and/or Matlab; Strong skills in written and oral communication of research results.

The successful candidate will be co-supervised by Dr. Xin Qiu, Dr. Neal Madras and Dr. Huaiping Zhu and working with the group including Dr. Yongsheng Chen, Dr. Rick Bello and Dr. Kaz Higuchi. The applicant should be enthusiastic and comfortable working with real as well as simulated data and must be able to work independently. Experience in health application of climate change would be an asset.

The appointment will be for one year, with possible extension for another year. Salary is negotiable and commensurate with qualifications. Depending on the qualification, teaching a undergraduate course in the department of Mathematics and Statistics is possible. Interested applicants should send their curriculum vitae and the names and contact information for three references by email to Huaiping Zhu <huaiping@mathstat.yorku.ca>.

Applications will continue to be processed until the position is filled. We thank all applicants, but only those selected for an interview will be contacted.