



Undergraduate student - Summer job

Department of Mathematical and Statistical Sciences, University of Alberta

Stochastic gravity models for angler movements in Alberta

We are looking for a highly motivated and organized undergraduate student to model angler movements in Alberta using stochastic gravity models. Human activities such as recreational boating are often key to the dispersal of an aquatic disease such as the whirling disease. Stochastic gravity models have been successfully used to model these activities. Alberta Environment and Parks (AEP) is interested to use such models for angler movements in Alberta. This project is in a collaboration with the Poesch Lab (Prof. Mark Poesch) and Lewis Lab (Prof. Mark Lewis and Dr. Pouria Ramazi).

The student will be responsible for *i*) building a stochastic gravity model for angler movements in Alberta's aquatic system, *ii*) organizing and compiling angler movement data surveyed from another project by AEP, *iii*) fitting the model using the data, and *iv*) performing statistical analysis on the results. The ideal student would have strong programming skills, be keen to learn some statistical analysis, and dedicate time to the project weekly. The student is also expected to meet with advisors on a weekly basis and participate in lab meetings. Proposed dates are May 1 to August 30, 2019.

If you are interested, please send an email with your CV and letter of interest to ramazi@ualberta.ca (Dr. Pouria Ramazi)