

Speaker: Léo Belzile (HEC Montréal)

Date: 08/05/2026 at 13:15 in 4 West 1.7

Title: How long should a block be?

Abstract:

The block maximum method is widely used in extreme value analysis. The idea is to approximate the distribution of the maximum of m observations by a generalized extreme value distribution. The quality of this approximation may be poor if the block length m is too small. Surprisingly little attention has been paid to the choice of m , although a good choice is crucial to the success of the method. In this paper we propose simple likelihood-based approaches and graphical diagnostics to determine whether a block length is suitable, accounting for potential left-censoring and rounding of measurements. The ideas are investigated using simulation and illustrated using wind speed, river flow and cumulative rainfall data. This talk is based on joint work with Anthony Davison (EPFL).