



Department of Decision Sciences

Statistics Seminar

Applying multivariate extremes value methods for univariate and spatial flood risk assessment

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12:30pm Room 3-E4-SR03 Via Röntgen 1 Milano

Abstract

The talk will cover two distinct problems in flood risk assessment: the estimation of the distribution of flood peaks at a site and the estimation of the distribution of “financial loss” over a region from flooding. Approaches based on univariate extreme value theory exist for each of these, with the one for flood peaks being very widely used. Both of these problems are essentially multivariate problems. In this talk I will present a multivariate extreme value approach to each of the two problems that offers substantial improvements over the existing methods.