Distinguished Lecture Series

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3:30 PM

Via Zoom



An overview of the recent loss modeling approaches and their impact on risk measures

The "key risk measures" such as Value-at-Risk (VaR) and Conditional Tail Expectation (CTE) are important for capital allocation decisions as they inform actuaries and risk managers about the degree to which a line of business or a company is exposed to a particular aspect of risk. These measures are typically estimated based on the best-fitting statistical model selected from a set of models considered in loss modeling.

In this talk, three different approaches for finding the best fitting model will be introduced using computational tools. The first approach is based on finite mixtures where the components belong to the same parametric distribution family. The second approach uses composite models where two different distributions are used for the head and tail and these distributions are combined in a smooth way at a specific threshold. Finally, the model averaging approach will be introduced and applied to the estimation of risk measures. The results of the simulation studies will be discussed as well as the applications using two popular data sets on Danish Fire and Norwegian Fire losses.

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Please pre-register at:

https://uregina-ca.zoom.us/meeting/register/tJ0sdO6qqT0rHN3hfjRzrWQuXQSqypXveu9s

Mathematics and Statistics



