

SÉMINAIRE DE MATHÉMATIQUES ACTUARIELLES ET FINANCIÈRES

organisé par *Quantact*, le *Laboratoire de mathématiques actuarielles et financières* du CRM

MB 5.265

Pavillon John Molson, Campus SGW, Concordia University

22 janvier 2016, 15:00-16:00

Phuong Anh Vu

University of New South Wales, Australia

Université de Montréal, Canada

Stochastic Loss Reserving with Dependence: A Flexible Multivariate Tweedie Approach

Stochastic loss reserving with dependence has received increased attention in the last decade. A number of parametric multivariate approaches have been developed to capture dependence between lines of business within a claims portfolio. Using the multivariate Tweedie distribution developed in Furman and Landsman (2010), we propose a multivariate Tweedie approach to capture cell-wise dependence in loss reserving. This approach has a number of ideal properties, including marginal flexibility, ease of physical interpretation and moments that can be obtained analytically. Theoretical results are illustrated using a simulated dataset and a real dataset from a property-casualty insurer in the US.

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