Actuarial Research Seminar Series 2006

Speaker: Colin Priest

Title: Research Ideas Coming From General Insurance

Date & Time: Wednesday 8 November 2006 at 4 p.m. to 5 p.m.

Location: E4A, Seminar Room 623

Abstract: The seminar will give an overview of some practical problems in general insurance where some research could help, including:

- How to estimate model risk in reserving (e.g. Bayesian methods)
- How to include operational risk (e.g. actuary bias, data errors) in reserving uncertainty measures
- How to include operational risk (e.g. actuary bias) in reserving diversification estimates
- More robust measures of reserving diversification benefits, perhaps using dimensionality reduction (e.g. PCA)
- Estimating reserving diversification benefits using sparse data (e.g. just a few reserving triangles)
- How to adjust reserving uncertainty measures for changes in the size of portfolios over the past few years (e.g. start up portfolios)
- What is the most efficient method to reverse engineer competitor premium structures
- Applying prospect theory to model price elasticity for premiums
- Can we use game theory to explain and predict the insurance cycle, and can game theory tell us the optimum strategy to take through the insurance cycle
- Can we use game theory to explain and predict bursts of superimposed inflation caused by changes in court awards