# Joint Colloquium Lecture of the Department of Mathematics, Department of Statistics & Applied Probability and Institute for Mathematical Sciences

## Exponential Behavior in Risk Theory

by Jef L. Teugels  
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### Abstract

We consider a portfolio situation where there is possibly dependence between a waiting time for a claim and its actual value. By employing an underlying random walk structure we are able to obtain rather explicit exponential estimates for the finite time ruin probabilities. We illustrate the general result with a few explicit copulas. This research is based on joint work with Hansjörg Albrecher (Technische Universität Graz, Austria).

### About the Speaker

Professor Jef Teugels obtained his PhD from Purdue University in 1967. He spent his professional career at Katholieke Universiteit Leuven, from which he retired as Professor Emeritus in October 2004. His main research interests are stochastic processes, environmetrics, actuarial science and recently campanology.


He was Scientific Secretary (1975-85) and President (1995-97) of the Bernoulli Society, Vice-President of the International Statistical Institute in 2001-03, and has been an advisor to EURANDOM, Eindhoven since 1997.

His many honors include a fellowship in the Institute of Mathematical Statistics (1985), a Bernoulli Medal (1986) and an honorary doctorate from the University of the Aegean, Greece (2004). He is also Huespe Distinguido of the City of Guanajuato, Mexico (2000), a Distinguished Alumnus of Purdue University School of Science (2004), and an Honorary Member of the Belgian Statistical Society (2005).

### Date

Thursday, 16 Nov 2006

### Venue

Colloquium Room B  
S14, #03-09, Department of Mathematics

### Time

3:00pm