

UNSW Actuarial Studies Research Seminar

**Friday 14 September 2007
1.00pm-2.00pm
UNSW Kensington Campus Quad1046**

Topic

Portfolio management and minimization of the root of a quadratic functional under a system of affine equality constraints

**Professor Zinoviy Landsman
Visiting Research Fellow, UNSW
Actuarial Research Centre,
Department of Statistics, University of Haifa, Israel.
E-mail: landsman@stat.haifa.ac.il**

Abstract

This seminar will present an explicit closed form solution of the problem of minimizing the root of a quadratic functional subject to a system of linear constraints. The result generalizes Landsman (2006) where the optimization problem was solved under only one linear constraint. This is of interest for solving problems pertaining to portfolio management in financial economics as well as some classes of feasibility and optimization problems which frequently occur in tomography and other fields. The particular case of a finance portfolio is discussed. The results are demonstrated with data from NASDAQ/Computers.

Landsman, Z. (2007). "Minimization of the root of a quadratic functional under an affine equality constraint". Journal of Computational and Applied Mathematics. To appear.

**RSVP: If you wish to attend please advise Sussan Su
(q.su@unsw.edu.au) by Monday 10 September 2007**