Department of Mathematical Sciences

Seminar in Stochastic Systems

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Graduate Engineering & Research Center
University of Florida

General Deviation Measures and Portfolio Analysis

Tuesday, February 24, 2004
4:00 pm
Pierce 116

Abstract: The presentation discusses several risk management applications along with corresponding optimization approaches. Emphasis is given to the development of general deviation measures and their interpretation in the context of risk analysis and statistics. In particular, the presentation considers the application of deviation measures in portfolio optimization. Through techniques of convex analysis, the results deal rigorously with solution nonuniqueness and a potential lack of differentiability of the deviation expression with respect to the portfolio weights. Generalized one-fund theorems as well as covariance relations which resemble those commonly used in capital asset pricing models are derived.

Dr. Zabarankin has a Ph.D. in Applied Mathematics from Kiev Taras Shevchenko University, Ukraine and a Ph.D. in Industrial and Systems Engineering awarded by the University of Florida. His research interests are in the area of optimization and optimal control, risk management, mathematical physics and partial differential equations.

Refreshments will be served at 3:50 pm.

For more information contact Prof. Darinka Dentcheva at ddentche@stevens-tech.edu or call 201-216-5449.