Universität Karlsruhe (TH)
Fakultät für Wirtschaftswissenschaften

KIT Karlsruhe Institute of Technology

VORträge zum Operations Research

Kolloquium des Instituts für Operations Research

Zeit:	Freitag, 5. August 2011, 10:00 Uhr
Ort:	Raum 111, Gebäude 20.13
Es spricht:	Prof. Dr. Gerhard-Wilhelm Weber, Middle East Technical University, Ankara
Zum Thema:	**The New Robust Conic GPLM Method with an Application to Finance and Regulatory Systems: Prediction of Credit Default and a Process Version**

Abstract: This paper contributes to classification and identification in modern finance through advanced optimization. In the last few decades, financial misalignments and, thereby, financial crises have been increasing in numbers due to the rearrangement of the financial world. In this study, as one of the most remarkable of these, countries debt crises, which result from illiquidity, are tried to predict with some macroeconomic variables. The methodology consists of a combination of two predictive regression models, Logistic Regression (LR) and Robust Conic Multivarite Adaptive Regression Splines (RCMARS), as linear and nonlinear parts of a Generalized Partial Linear Model (GPLM). RCMARS has an advantage of coping with the noise in both input and output data and of obtaining more consistent optimization results than CMARS. An advanced version of Conic Generalized Partial Linear Model (CGPLM) which includes robustification of the data set is introduced: Robust Conic Generalized Partial Linear Model (RCGPLM). This new model is applied on a data set that belongs to 45 emerging markets with 1019 observations between the years 1980 and 2005. As a further approach, applicability of RCGPLM to dynamical regulatory networks, such as eco-finance and gene-environment networks, is introduced and briefly discussed.

Die Vorträge zum Operations Research wenden sich an alle Interessierten!

Ab 9:30 Uhr ist am Institut für Operations Research (Gebäude 20.13, Raum 104)
Gelegenheit zu einem Gespräch mit dem Referenten bei einer Tasse Kaffee gegeben.

Bei Rückfragen wenden Sie sich bitte an:

Prof. Dr. Oliver Stein, Institut für Operations Research.