MA04-013 - Mathematics and Credit Risk

Abstract

This project is aimed to bring together models and methods from mathematical finance with real world applications in the field of credit risk and bank management. Major concepts of mathematical finance like no-arbitrage theory and utility maximization which proved to be successful in the evaluation of derivative securities have to be extended and new models have to be developed to meet the requirements of the rapidly growing area of credit risk management. The project will focus on fundamental questions like optimal risk transfer and contract design in incomplete markets as well as on more applied questions like dependent defaults, affine credit spread modeling, valuation of credit derivatives, among others. The composition of the team of applied researchers is aimed to bring theoretical innovations to real-world implementations within the duration of this project.

Keywords:
credit risk, risk transfer, risk measurement

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Status: Completed (02.05.2005 – 30.04.2010)

Further links to the persons involved and to the project can be found under
https://wwtf.at/funding/programmes/past/ma/MA04-013/