

## Mathematics and Finance

### Abstract

Rüdiger Frey takes an active interest in financial mathematics, quantitative finance and financial economics in general. His recent research is concerned with credit derivatives, dynamic credit risk modeling, and a variety of topics in quantitative risk management. Moreover, he is working on the hedging of derivatives in illiquid or incomplete markets, and on several optimization problems in finance.

He has published in leading international academic journals, including Mathematical Finance, Finance and Stochastics, the Journal of Economic Dynamics and Control, and the Journal of Empirical Finance. Moreover, he is coauthor of the well-known book "Quantitative Risk Management: Concepts, Techniques & Tools" (Princeton University Press 2005), which is widely accepted to be a standard reference work. He is an associate editor of the journal Mathematical Finance, and he has frequently served as a referee for most major journals in the field.

Professor Frey has extensive teaching experience in the fields of financial mathematics, probability theory and statistics, quantitative risk management and (financial) optimization. Prior to coming to Vienna, Rüdiger Frey was a Professor of Financial Mathematics and Optimization at the University of Leipzig, Germany. Moreover, he has held academic positions both at the University of Zurich and at the Federal Institute of Technology (ETH), also in Zurich.

He has been involved in consulting projects for Swiss and German insurance companies and banks, and he frequently gives professional training courses in the field of quantitative risk management. He has also been in charge of several third-party funded research projects as the project leader. Rüdiger Frey holds a degree in mathematics from the University of Bonn, where he received his PhD in financial economics in 1996.

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Principal Investigator: Rüdiger Frey

Institution: Vienna University of Economics and Business



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Further links about the involved persons and regarding the project you can find at

<https://archiv.wwtf.at/programmes/mathematics/SC10-001>