

Stefan Ankirchner



Academic career

2002	Diploma in Mathematics, LMU Munich
2005	Dr. rer. nat., HU Berlin
2005 - 2006	Chapman Fellow, Imperial College, London, England, UK
2006 - 2008	Researcher, Matheon, HU Berlin
2008 - 2009	Quantitative Analyst, EnBW Trading, Karlsruhe
2009 - 2014	Professor (W2, Bonn Junior Fellow), University of Bonn
Since 2014	Professor (W2), Institute for Mathematics, University of Jena

Honours

2006	Förderpreis der Fachgruppe Stochastik der Deutschen Mathematiker-Vereinigung
2006	Dissertationspreis Adlershof

Offers

2009	Junior Professorship, University of Ulm
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Research Area G My main focus are Backward Stochastic Differential Equations (BSDEs) as a powerful tool for solving stochastic control problems. E.g. we have appealed to BSDEs for solving the Skorokhod embedding problem, and we have derived time bounds up to which probability distributions can be embedded into a Brownian motion, possibly with drift.

Research Area H A major focus of my research is market risk that cannot be perfectly hedged, but only cross hedged with highly correlated traded proxies. In particular, I have studied the effect of stochastic correlation and cointegration on hedge ratios and hedging error characteristics.

Supervised theses

Master theses: 2
Diplom theses: 2, currently 4
PhD theses currently: 1

Selected publications

- [1] Stefan Ankirchner, Gonçalo Dos Reis, and Peter Imkeller. Pricing and hedging of derivatives based on nontradable underlyings. *Math. Finance*, 20(2):289–312, 2010.
- [2] Stefan Ankirchner, Peter Imkeller, and Alexandre Popier. On measure solutions of backward stochastic differential equations. *Stochastic Process. Appl.*, 119(9):2744–2772, 2009.
- [3] Stefan Ankirchner, Gregor Heyne, and Peter Imkeller. A bsde approach to the skorokhod embedding problem for the brownian motion with drift. *Stoch. Dyn.*, 8(1):35–46, 2008.
- [4] Stefan Ankirchner, Peter Imkeller, and Alexandre Popier. Optimal cross hedging of insurance derivatives. *Stoch. Anal. Appl.*, 26(4):679–709, 2008.
- [5] Stefan Ankirchner, Steffen Dereich, and Peter Imkeller. Enlargement of filtrations and continuous girsanov-type embeddings. In *Séminaire de Probabilités XL*, volume 1899 of *Lecture Notes in Math.*, pages 389–410. Springer, Berlin, 2007.
- [6] Stefan Ankirchner, Gonçalo Dos Reis, and Peter Imkeller. Classical and variational differentiability of bsdes with quadratic growth. *Electron. J. Probab.*, 12:no. 53, 1418–1453, 2007.