

Prof. Dr. Frank Riedel
PROFESSOR FOR MATHEMATICS AND ECONOMICS
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Academic Appointments

since 2009	Director, <i>Institute of Mathematical Economics,</i> <i>Bielefeld University</i>
since 2007	Full Professor <i>Bielefeld University</i>
2003 – 2007	Associate Professor <i>Bonn University</i>
2002/03	Feodor Lynen–Grant from Alexander von Humboldt–Foundation <i>Stanford University</i>
2002	Research Grant from German Research Foundation (DFG) <i>University of California, Berkeley</i>
2000 – 2002	Assistant Professor (C1) <i>Humboldt–Universität zu Berlin</i>
1997 – 2000	Research Fellow <i>Humboldt–Universität zu Berlin</i>

Visiting Positions

2011/12	Visiting Fellow, ORFE Dept. <i>Princeton University</i>
2007	Visiting Professor <i>Universität Paris I, Pantheon–Sorbonne</i>
2005, 2009	Visiting Professor <i>University Paris IX, Dauphine</i>

Education

1998 – 2002	Habilitation in Economics, Humboldt–University at Berlin
1995 – 1998	Ph.D. in Economics, Humboldt–University at Berlin
1989 – 1995	Diploma in Mathematics, Freiburg University

Honors and Grants

2003	Heisenberg-Grant by the German Research Foundation (DFG)
2002/03	Feodor-Lynen-Grant by the Alexander von Humboldt-Foundation
2002	Research Grant by the German Research Foundation (DFG)
1999	Humboldt Prize for Outstanding Dissertations
1995 – 98	Ph.D.-Program, Humboldt-University at Berlin

Offers

2007, University Vienna, (Successor of Egbert Dierker)
2010, Universität Bonn, Hausdorff Chair for Excellence, Mathematical Economics

Editorial Work

2009–	Editorial Board Economic Theory
2010–	Editorial Board Journal of Mathematical Economics
2010–	Editorial Board Mathematics and Financial Economics
2011–	Editorial Board Finance and Stochastics
2012–	Editorial Board Decisions in Economics and Finance
2012–	Editorial Board Journal of Dynamics and Games

Consulting

1999, 2000	Bidding Strategies for Mannesmann Mobilfunk (now Vodafone) in Spectrum Auctions (1999 GSM Auktion, 2000 UMTS Auktion)
2008	Background Consulting on Bidding Strategies for an Electricity Auction for a Consulting Firm
2011	Report for the Prosecutor of the City of Bielefeld concerning Credit Derivative Trading by a County

Supervised Dissertations

1. Lars Koch, Bonn Graduate School of Economics, 2004–07
2. Xia Su, Bonn Graduate School of Economics, 2004–08
3. Marcelo Cadena, Bonn Graduate School of Economics, 2004–2009
4. Daniel Engelage, Bonn Graduate School of Economics, 2006–2009
5. Klaas Schulze, Bonn Graduate School of Economics, 2006–2009
6. Christina Matzke, Bonn Graduate School of Economics, 2006–2009
7. Monika Bier, DFG–Projekt Ri 1128–3–1, 2006–2009
8. Niko Noeske, extern, 2006–2011
9. Tatjana Chudjakow, EBIM, 2007–2011
10. Jan–Henrik Steg, EBIM, 2007–2010
11. Simon Krsnik, EBIM, 2007–2011
12. Jörg Vorbrink, IGK Stochastics and Real World Models, 2008–2011
13. Linda Sass, EBIM, 2009–2013
14. Christoph Diehl, EBIM, 2009–2014
15. Patrick Beissner, IGK Stochastics and Real World Models, 2010–2014
16. Jörg Bleile, EBIM, 2010–
17. Frederik Diermann, Bielefeld Graduate School of Economics, 2011–
18. Tobias Hellmann, Bielefeld Graduate School of Economics, 2011–
19. Lan Sun, Erasmus Mundus Doctorate in Economics, 2012 –
20. Benoît Decerf, Erasmus Mundus Doctorate in Economics, 2013 –

Research Grants, Third-Party Funding

1. Feodor-Lynen Grant, Alexander von Humboldt-Stiftung, Stanford, 2003
2. Heisenberg-Grant, Humboldt University Berlin 2003
3. DFG-Projekt Ri 1128-3-1, Robust Irreversible Investment, 2006-09
4. Projekt A6, SFB 673, Alignment in Communication, 2007-2010
5. Exzellenzcluster Mathematics: Foundations, Models, Applications, Director of Research Area H, Stochastic market models and aggregation, 2006-07
6. Teilprojektleiter International Graduate School *Economic Behavior and Interaction Models*, EBIM, Bielefeld – Paris, 2009-2015
7. Teilprojektleiter International Graduate School *Stochastics and Real World Models*, Bielefeld – Beijing, 2009-2015
8. DFG-Projekt Ri 1128-4-1, Singular Control Games: Strategic Issues in Real Options and Dynamic Oligopoly under Knightian Uncertainty, 2011-
9. Joint DFG-ANR (Agence Nationale de la Recherche, France) Project Ri-1128-6-1, Ambiguity in Games: The Role of Uncertainty in Strategic Interactions

Five Selected Publications

1. Optimal Stopping with Multiple Priors,
Econometrica, 77, 2009, 857–908
2. Other-regarding Preferences in General Equilibrium (with Martin Dufwenberg,
Paul Heidhues, Georg Kirchsteiger and Joel Sobel)
Review of Economic Studies, 78, 2011, 613-639
3. Dynamic Coherent Risk Measures,
Stochastic Processes and Their Applications, 112, 2004, 185–200
4. Voronoi Languages (with Gerhard Jäger, Lars Metzger)
Games and Economic Behavior, 73, 2011, 517-537
5. On the Dynamic Foundation of Evolutionary Stability in Continuous Models (with
Jörg Oechssler),
Journal of Economic Theory, 107, 2002, 223–252

Publications

32. The Foster-Hart Measure of Riskiness for General Gambles, *Theoretical Economics* to appear with Tobias Hellmann
31. The Strategic Use of Ambiguity, *Theory and Decision*, 76, 469–509, with Linda Sass
30. Generalized Kuhn–Tucker Conditions for N-Firm Stochastic Irreversible Investment under Limited Resources, *SIAM Journal on Control and Optimization* 51, 2013, 3863–3885 with Maria Chiarolla and Giorgio Ferrari
29. Intertemporal Equilibria with Knightian Uncertainty, *Journal of Economic Theory* 148, 2013, 1582-1605 with Rose-Anne Dana
28. Existence of Financial Equilibria in Continuous Time with Potentially Complete Markets, *Journal of Mathematical Economics* 49 (5), 2013, 398–404 with Frederik Herzberg
27. The Best Choice Problem under Ambiguity (with Tatjana Chudjakow), *Economic Theory*, 2013, 54 (1), 77-97
26. Optimal Stopping under Ambiguity in Continuous Time, (with Xue Cheng), *Mathematics and Financial Economics*, 7, 2013, 29-68
25. Evolutionary Stability in First Price Auctions (with Fernando Louge), *Dynamic Games and Applications*, 1, 2012, 110–128 (with Fernando Louge)
24. On Irreversible Investment (with X. Su), *Finance and Stochastics*, 15, 2011, 607-633,
23. Voronoi Languages (with Gerhard Jäger, Lars Metzger) *Games and Economic Behavior*, 73, 2011, 517-537
22. Other-regarding Preferences in General Equilibrium (with Martin Dufwenberg, Paul Heidhues, Georg Kirchsteiger and Joel Sobel) *Review of Economic Studies*, 78, 2011, 613-639
21. On Equilibrium Prices in Continuous Time (with Filipe Martins-da-Rocha), *Journal of Economic Theory*, 145, 2010, 1086-1112
20. Optimal Stopping with Multiple Priors, *Econometrica*, 77, 2009, 857–908
19. Brown–von Neumann–Nash Dynamics: the Continuous Strategy Case (with J.Hofbauer and J.Oechssler), *Games and Economic Behavior*, 65, 2009, 406-429

18. Optimal Consumption Choice with Intolerance for Declining Standard of Living,
Journal of Mathematical Economics, 45, 2009, 449-464
17. Immediate Demand Reduction in Simultaneous Ascending Bid Auctions: A Uniqueness Result, (with Elmar Wolfstetter)
Economic Theory, 29, 2006, 721-726
16. Stochastic Equilibria For Economies Under Uncertainty With Intertemporal Substitution (with Felipe Martins-da-Rocha)
Annals of Finance, 2, 2006, 101-122
15. Stability of the Replicator Equation for a Single-Species with a Multi-Dimensional Continuous Trait Space (with Ross Cressman, Josef Hofbauer),
Journal of Theoretical Biology, 239, 2006, 273-288
14. Generic Determinacy of Equilibria with Local Substitution,
Journal of Mathematical Economics, 41, 2005, 603-616
13. Dynamic Coherent Risk Measures,
Stochastic Processes and Their Applications, 112, 2004, 185-200
12. Heterogeneous Time Preferences and Humps in the Yield Curve: The Preferred Habitat Theory Revisited,
European Journal of Finance, 10, 2004, 3-23
11. Implementing Efficient Market Structure (with Veronika Grimm, Elmar Wolfstetter),
Review of Economic Design, 7, 2003, 443-463
10. Low Price Equilibrium in Multi-Unit Auctions: The GSM Spectrum Auction in Germany (with Veronika Grimm, Elmar Wolfstetter),
International Journal of Industrial Organization, 21, 2003, 1557-1569
9. Arrow-Debreu Equilibria With Asymptotically Heterogeneous Expectations Exist,
Economic Theory, 21, 2003, pp.929-934
8. On the Dynamic Foundation of Evolutionary Stability in Continuous Models (with Jörg Oechssler),
Journal of Economic Theory, 107, 2002, 223-252
7. The Third Generation (UMTS) Spectrum Auction in Germany (with Veronika Grimm, Elmar Wolfstetter),
ifo studien, 48, 2002, 123-143
6. Optimal Consumption Choice under Uncertainty with Intertemporal Substitution (with Peter Bank),
Annals of Applied Probability, 11, 2001, pp. 750-788

5. Existence of Arrow–Radner Equilibrium with Endogenously Complete Markets under Incomplete Information,
Journal of Economic Theory, 97, 2001, pp. 109–122
4. Existence and Structure of Stochastic Equilibria with Intertemporal Substitution (with Peter Bank),
Finance and Stochastics, 5, 2001, pp. 487-509
3. Evolutionary Dynamics on Infinite Strategy Spaces (with Jörg Oechssler),
Economic Theory 17, 2001, pp. 141-162
2. Non-Time Additive Utility Optimization - the Case of Certainty (with Peter Bank),
Journal of Mathematical Economics, 33, 2000, pp.271–290
1. Decreasing Yield Curves in a Model with an Unknown Constant Growth Rate,
European Finance Review, 4, 2000, pp.51-67.

Permanent Working Papers

1. Optimal Dynamic Choice of Durable and Perishable Goods (mit P.Bank)
Stanford University, 2003, Working Paper 03-009
2. A class of Heath-Jarrow-Morton models in which the unbiased expectations hypothesis holds,
Humboldt–Universität zu Berlin, Discussion Paper 19, 1997, SFB 373