Melanie Schienle

contact information

Chair of Statistical Methods and Econometrics (SME)
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Googlescholar: https://scholar.google.com/citations?user=RGITKtsAAAAJ&hl=en&oi=ao

■ academic positions

04/2015 -	Full Professor and Chair of Statistical Methods and Econometrics (W3, tenured), Department of Economics and Management, Karlsruhe Institute of Technology (KIT)
02/2021 -	Full Professor (by courtesy), Department of Mathematics, Karlsruhe Institute of Technology (KIT)
10/2012 - 03/2015	Associate Professor of Econometrics (W2, tenured), director of the Institute of Empirical Economics, Leibniz University Hannover
11/2008 - 09/2012	Assistant Professor Econometrics (W1), Humboldt-Universität zu Berlin
10/2004 - 10/2008	Research associate, Department of Economics, University of Mannheim, Germany

■ other appointments

01/2023 -	Scientist and Research Associate, Heidelberg Institute for Theoretical Studies (HITS)
10/2021 – 12/2022	Visiting scientist, Heidelberg Institute for Theoretical Studies (HITS)
06-08/2022	Visiting scientist, International Research Training Group 1792 "High Dimensional Nonstationary Time Series"
10-11/2016	Visiting scientist, Konkuk University, Korea

■ education

06/ 2008	Ph.D in Economics, Graduate School of Economics (CDSE) Mannheim University “summa cum laude” advisors: Prof. Dr. Enno Mammen (Mannheim), Prof. Oliver Linton, PhD (London School of Economics, LSE), thesis: “Nonparametric Nonstationary Regression”
09/ 2003	Diploma in Mathematics with minor in Theoretical Physics, Karlsruhe University GPA 1.0 with distinction (scale: 1 best - 5 fail, includes exchange year at University of Toronto)
06/1998	Highschool Diploma (GPA 1.0), Grimmelshausen-Gymnasium Offenburg

■ **publications** (refereed)

Identifying Success Factors of Microcredits Using Robust Variable Selection for High-Dimensional Panel Data (with L. Rüter), **Journal of the Royal Statistical Society A**, 2024 +, accepted, [link working paper] [link GitHub repo] doi:10.1093/jrsssa/qnae144

Predicting Value at Risk for Cryptocurrencies With Generalized Random Forests (with K. Görgen und R. Buse), **International Journal of Forecasting**, 2024+, accepted, [link working paper], [link GitHub repo]

High-Dimensional Macroeconomic Stress Testing of the Corporate Recovery Rate (with Adolreza Nazemi, Friedrich Baumann and Frank Fabozzi), **Quantitative Finance,** 2024, Volume 24 (11), 1669–1678, [doi:10.1080/14697688.2024.2414758]

Large Spillover Networks of Nonstationary Systems (with Shi Chen) **Journal of Business & Economic Statistics**, 2024, 42 (2), 422–436. doi: 10.1080/07350015.2022.2099870

Success Factors in Football: An Analysis of the EURO 2020 (with V. Renner, K. Görgen, H. Wäsche, A. Woll), **Journal of the Quantitative Analysis in Sports**, 2024, forthcoming. doi: 10.1515/jqas-2023-0026

Direction Augmentation in the Evaluation of Armed Conflicts (with J. Bracher, L. Rüter, F. Krüger, S. Lerch) **International Interactions**, 2023, 49(6), 989–1004. doi: 10.1080/03050629.2023.2255923

Collaborative Nowcasting of COVID-19 Hospitalization Incidences in Germany (with D. Wolffram, S. Abbott, M. an der Heiden, S. Funk, F. Günther, D. Hailer, S. Heyder, T. Hotz, J. van de Kasteele, H. Küchenhoff, S. Müller-

Hansen, D. Syliqi, A. Ullrich, M. Weigert, J. Bracher), **PLOS Computational Biology**, 2023, 19(8): e1011394. doi: 10.1371/journal.pcbi.1011394

Model Diagnostics and forecast Evaluation for Quantiles (with Tilmann Gneiting, Daniel Wolffram, Johannes Resin, Johannes Bracher, Timo Dimitriadis, Veit Hagenmeyer, Alexander Jordan, Kristof Kraus, Sebastian Lerch, Kaleb Phipps), **Annual Review of Statistics and its Applications**, 2023, Vol 10. doi: 10.1146/annurev-statistics-032921-020240

Assessing the Impact of Policy and Regulation Interventions in European Sovereign Credit Risk Networks: What worked best? (with Rebekka Buse and Jörg Urban), **Journal of International Economics**, 2022, Vol 139 (Nov 22), 103673 doi: 10.1016/j.jinteco.2022.103673, [older ESRB-WP-version]

National and subnational short-term forecasting of COVID-19 in Germany and Poland, early 2021 (with J. Bracher, D. Wolffram, J. Deuschel, K. Görgen, J.L. Ketterer, A. Ullrich, S. Abbott, M.V. Barbarossa, D. Bertsimas, S. Bhatia, M. Bodych, N.I. Bosse, J.P. Burgard, J. Fuhrmann, S. Funk, K. Gogolewski, S. Heyder, T. Hotz, Y. Kheifetz, H. Kirsten, T. Krueger, E. Krymova, N. Leithäuser, M.L. Li, J.H. Meinke ,B. Miasojedow, J. Mohring, P. Nouvellet, J.M. Nowosielski, T. Ożański, M. Radwan, F. Rakowski, M. Scholz, S. Soni, A. Srivastava, T. Gneiting*)*, 2022, **Communications Medicine***,* Vol 2 (136). doi: 10.1038/s43856-022-00191-8

Collaborative hubs: making the most of predictive epidemic modeling (joint with N.G. Reich, J. Lessler, S. Funk, C. Viboud, A. Vespignani, R.J. Tibshirani, K. Shea, M.C. Runge1, R. Rosenfeld, E.L. Ray, R. Niehus, H.C. Johnson, M.A. Johansson, H. Hochheiser, L. Gardner, J. Bracher, R.K. Borchering, M. Biggerstaff) **American Journal of Public Health**, 2021, Vol. 112 (6), 839-842. doi: 10.2105/AJPH.2022.306831

A Preregistered Short-term Forecasting Study of COVID-19 in Germany and Poland During The Second Wave (with J. Bracher, D. Wolffram, J. Deuschel, K. Görgen, J.L. Ketterer, A. Ullrich, S. Abbott, M.V. Barbarossa, D. Bertsimas, S. Bhatia, M. Bodych, N.I. Bosse, J.P. Burgard, J. Fuhrmann, S. Funk, K. Gogolewski, Q. Gu, S. Heyder, T. Hotz, Y. Kheifetz, H. Kirsten, T. Krueger, E. Krymova, M.L. Li, J.H. Meinke, K. Niedzielewski, T. Ożański, F. Rakowski, M. Scholz, S. Soni, A. Srivastava, J. Zieliński, D. Zou, T. Gneiting**), Nature Communications***,* 2021, Vol 12 (5173), doi: 10.1038/s41467-021-25207-0; (working paper version: medRxiv 2020.12.24.20248826; doi: https://doi.org/10.1101/2020.12.24.20248826)

Testing for an Omitted Multiplicative Long-Term Component in GARCH Models (with Christian Conrad), **Journal of Business & Economic Statistics**, 2020**,** Vol.38, No.2, 229-242; doi:10.1080/07350015.2018.1482759

Detecting structural differences in tail dependence of financial time series (with Carsten Bormann), **Journal of Business & Economic Statistics**, 2020, Vol.38, No.2, 380-392; doi:10.1080/07350015.2018.1506343

A retrospective assessment of different endodontic treatment protocols (with Andreas Bartols, Carsten Bormann, Luisa Werner, Winfried Walther, Christof E. Dörfer) **PeerJ,** 2020, 8:e8495 doi:10.7717/peerj.8495

Determining Vector Error Correction Models in High Dimensions (with Chong Liang), **Journal of Econometrics** 2019, Vol. 208, No. 2, 418-441; doi:10.1016/j.jeconom.2018.09.018

Measuring Connectedness of Euro Area Sovereign Risk (with Rebekka Buse)*,* **International Journal of Forecasting***,* 2019, Vol.35 , No.1, 25-44; doi:10.1016/j.ijforecast.2018.07.010

Semiparametric Estimation with Generated Covariates (with Enno Mammen and Christoph Rothe), **Econometric Theory,** 2016, Vol. 32, No.5, 1140-1177 ; doi:10.1017/S0266466615000134

Systemic Risk Spillovers in the European Banking and Sovereign Network (with Frank Betz (EIB, Luxemburg), Nikolaus Hautsch, Tuomas Peltonen (ECB, Frankfurt)), **Journal of Financial Stability**, 2016, Vol.25 , 206–224 doi:10.1016/j.jfs.2015.10.006 - [Results reported in the ECB Financial Stability Review in May 2013 (pages 71-73 ,box 6) and Nov.2013 (page 74 ,chart 3.15)]

Beyond dimension two: A test for higher-order tail risk (with Carsten Bormann and Julia Schaumburg), **Journal of Financial Econometrics,** 2016, Vol. 14, No 3, 552-580; doi: 10.1093/jjfinec/nbv022

Financial Network Systemic Risk Contributions (with Nikolaus Hautsch and Julia Schaumburg), **Review of Finance,** 2015, Vol 19, No 2, 685-738; doi:10.1093/rof/rfu010

Nonparametric Kernel Density Estimation Near the Boundary (with Peter Malec), **Computational Statistics & Data Analysis**, 2014, Vol. 72, 57-76, doi:10.1016/j.csda.2013.10.023

Forecasting systemic impact in financial networks (with Nikolaus Hautsch and Julia Schaumburg, **International Journal of Forecasting**, 2014, Vol.30, No.3, 781–794; doi:10.1016/j.ijforecast.2013.09.004

Capturing the Zero: A New Class of Zero-Augmented Distributions and Multiplicative Error Processes (with Nikolaus Hautsch and Peter Malec), **Journal of Financial Econometrics**, 2013, Vol.12, No.1, 89-121; doi: 10.1093/jjfinec/nbt002

Nonparametric Regression with Nonparametrically Generated Regressors (with Enno Mammen and Christoph Rothe), the **Annals of Statistics**, 2012, Vol. 40, No. 2, 1132-1170, doi:10.1214/12-AOS995

publications (other)

Vorhersagen sind schwer, vor allem die Zukunft betreffend: Kurzzeitprognosen in der Pandemie (with J. Bracher, D. Wolffram, T.Gneiting) **DMV Mitteilungen**, 2021, Vol. 29, No. 4, 2021, 186-190. [doi: 10.1515/dmvm-2021-0073]

Additive Models: Extensions and Related Models (joint with Enno Mammen and Byeong U. Park) the **Handbook of Applied Nonparametric and Semiparametric Econometrics and Statistics** (editors Racine, Ullah), Oxford University Press 2014

Generated Regressors in Nonparametric Estimation: A Short Review (joint with Enno Mammen and Christoph Rothe), **in Recent Developments in Modeling and Applications in Statistics** (editors Oliveira, da GraccaTemido, Henriques and Vichi), Springer 2013

Nonparametric Estimation of the Risk Neutral Density (with Maria Grith and Wolfgang Härdle) in **Handbook of Computational Finance** (editors Duan, Härdle, Gentle), Springer 2012

Nonparametric Nonstationary Regression
In **Oberwolfach Report***,* Volume 4, Issue 2, 2007 for the Workshop on Semiparametric and Nonparametric Methods in Econometrics

papers under revision & submitted papers/ working papers

Simple Macroeconomic Forecast Distributions (with F. Becker and F. Krüger), [arXiv.2408.08304] [github repo]; R&R Annals of Applied Statistics

Ultra-High Dimensional Cointegration (with Shi Chen) KIT working paper, pdf available on request

Estimation of spatio-temporal extremes via generative neural networks (with C.Bülte and L. Leimenstoll) working paper [arXiv:2407.08668]

Integrating Nowcasting and Multimodel Forecasting for SARI Hospitalizations in Germany (with J. Bracher and D. Wolffram), KIT working paper

Approximate Additive Regression with Deep Neural Network-type Instruments (with K. Görgen and K. Yu), KIT working paper, pdf available on request

Estimation risk for systemic risk measures driven by semi-parametric models (with Y. Chen, N. Hautsch, J. Leymarie) KIT working paper, pdf available on request

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Evaluating Forecasts for Clustered Panel Data (with L. Rüter and M. Reichenbacher) KIT working paper, pdf available on request

Prospective collaborative nowcasting and short-term forecasting of respiratory diseases in Germany (with D. Wolffram, N. Bardeck, W. Bock, M. Böhm, S. Contreras, P. Dönges, F. Günther, R. Kaiser, A. Kuhlmann, B. Lange, U. Reinacher, I. Rodiah, J. Bracher and the RespiNow Study Group) [Link Respinowhub] KIT working paper

Time-varying Limit Order Book Networks (with Chen, S., Härdle, W.), KIT working paper, pdf available on request

Pictures as Instruments: Explaining Property Prices with Crime (with J. Deuschel, K. Görgen), KIT working paper, pdf available on request

How have German University Tuition Fees Affected Enrollment Rates: Robust Model Selection and Inference in High-Dimensions (with K. Görgen) KIT working paper, pdf available on request

Nonparametric Nonstationary Regression with Many Covariates KIT working paper, pdf available on request

■ **conference/ workshop presentations // invited seminars**

2025: Workshop on nonparametric methods and AI, Seoul National University (Feb 2025, scheduled; invited), Workshop Econometrics, TU Dortmund (April 2025 scheduled; invited) // Uni Duisburg-Essen (invited, scheduled)

2024: Time Series Symposium, Rome, Villa Mondragone, Oct 2024 (invited), International Symposium on Forecasting, July 2024, Dijon (Keynote Speaker + IJF-invited Speaker), Women in Econometrics, June 2024, Bologna (invited) // Manchester University, Brown University

2023: Workshop on Robust Methods in Financial Econometrics, September 2023, Copenhagen (invited), Conference of the Central European Network in Biostatistics (CEN), September 2023, Basel (invited), Workshop on Financial Econometrics, Machine Learning and Big Data, May 2023, UPF and ENSADE Barcelona (invited), Open Science Symposium, April 2023, Berlin (Keynote Speaker, invited) \\ Oxford University, Uni Hohenheim

2022: Workshop on Survey Data and Probabilistic Expectations, June 2022, Heidelberg \\ ENSAE CREST Seminar, Paris, KIT im Rathaus, Heidelberg Institute for Theoretical Studies (HITS), Freiburg University

2021: Meeting of the German Economic Association (Verein für Socialpolitik), September 2021 (invited workshop) \\ HU Berlin, Regensburg University, DeCOI Network

2020: Heidelberg Institute for Theoretical Studies (HITS), Magdeburg University, TU Dortmund, ``Ausschuss Ökonometrie '' Verein für Socialpolitik Rauischholzhausen, Vienna University, TU Dresden, LMU Munich

2019: IAAE, Cyprus, June 2019, INET Conference on Big Data Methods in Econometrics and Finance (invited), Cambridge UK, May 2019 \\ European Systemic Risk Board at the European Central Bank, Erasmus University Rotterdam, Weierstrass Institute Berlin

2018: CFE-ERCIM (invited), Pisa, December 2018, IMS-APRM (invited), Singapore, June 2018 \\ Cologne University, Konstanz University, Tinbergen Institute Amsterdam, HU Berlin, Toulouse University

2017: Verein für Socialpolitik, Wien, September 2017 (invited Session, Ausschuss für Ökonometrie) \\ Freiburg University, Aarhus University and CREATES (DK), Uppsala University (SE)

2016: CFE-ERCIM, Seville, Spain, December 2016 (invited), IMS Asia-Pacific RIM Meeting, Hong-Kong, June 2016 (invited), HITS Workshop on Forecasting, Heidelberg, June 2016 (invited), Dresden, March 2016 (invited) \\ Essex University (UK)

2015: ERCIM/CFE (invited), London, December 2015, Conference on Nonparametric Nonlinear Time Series (invited), Oxford, November 2015, World Congress of the Econometric Society, Montreal, August 2015, SYRTO Conference on Systemic Risk, Amsterdam (invited), June 2015, 11th BMRC-DEMS Conference on Macro and Financial Economics/Econometrics (invited), London, May 2015 \\ ISOR Seminar Vienna University, "Ausschuss Ökonometrie", Rauischholzhausen,

2014: ERCIM/CFE (invited), Pisa, December 2014, IMS Asia-Pacific RIM Meeting (invited), Taipeh, July 2014, Workshop on "Non- and Semiparametric Volatility and Correlation Models ", Paderborn, July 2014 \\ Kiel University, University of Duisburg-Essen, Bonn University, Cambridge University (UK), Economic Risk Seminar HU Berlin, Osnabrück University, University of East Anglia (UK)

2013: Conference on Applicable Semiparametrics (invited), Berlin, October 2013; Humboldt-Copenhagen Conference, Berlin, March 2013 // Kiel University, European Banking Authority (EBA) in London, Karlsruhe Institute of Technology

2012: IMS Asia-Pacific RIM Meeting (invited), Tokyo, July 2012; First Meeting of the Society of Nonparametric Statistics (invited), Thessaloniki, June 2012; SETA (Symposium of Econometric Theory and Applications), Shanghai, May 2012 // FU Berlin

2011: Conference on Macro and Financial Econometrics, Heidelberg, September 2011; Verein für Socialpolitik, Frankfurt, September 2011; SETA (Symposium of Econometric Theory and Applications), Melbourne, April 2011 // Hannover University, Brunel University (UK), CORE-Ecares Seminar at Louvain-la-Neuve

2010: ESWC (Econometric Society World Congress), Shanghai, August 2010 // Heidelberg University, Humboldt University Berlin, Tilburg University and CentER

2009: Humboldt - Princeton Conference, Princeton, October 2009; International Symposium on Risk Management and Derivatives, Xiamen, China, July 2009; Banff Workshop "Non- and Semiparametric Methods", Banff Canada, April 2009; Oberwolfach Workshop "Sparse Recovery Problems in High Dimensions: Statistical Inference and Learning Theory", March 2009 // Mathematical Statistics Seminar at Weierstrass Institute Berlin, University of Cyprus at Lefkosia, CRC 649 Seminar in Motzen, Economic Risk Seminar at HU Berlin, Jour fixe CRC 649, Berlin

2008: ESEM (Meeting of the European Econometric Society), Milano, August 2008; German Open Conference on Probability and Statistics, Aachen, March 2008 // Princeton University, Humboldt University Berlin

2007: European Winter Meeting of the Econometric Society, Brussels, November 2007; Oberwolfach Workshop "Non- and Semiparametric Methods", March 2007 // CDSEM-Seminar Mannheim University, Brown Bag Seminar Mannheim University, GREMAQ statistics and econometrics seminar Toulouse University

2006: ESEM (Meeting of the European Econometric Society), Vienna, August 2006; ENTER conference, Stockholm, January 2006 // London School of Economics, University College London

■ grants and awards

2022-2025	**PI and Subproject Lead SP4 BMBF Consortium RESPINOW –** with Johannes Bracher (KIT), Claudia Denkinger (Uni Heidelberg), Berit Lange (HZI, Koordination), Viola Priesemann (MPI Göttingen) + partners from: Uni Tübingen, Uni Köln, Uni Münster, Uni Halle, TU Kaiserslautern, RKI
2022-2024	**PI Helmholtz Association (HGF) research consortium** "COping CAPacity of nationsfacing systemic crisis – a global intercomparison exploring the SARS-CoV-2 pandemic (COCAP) (190,000€ share of 3,7 Mio) - (joint with UFZ, HZDR, Uni Leipzig, LMU München, ifo)
2022-2023	**Spokesperson** HEiKA Scouting for Excellence grant with project "Transparent Predictions for Society" (consortium Uni Heidelberg, Uni Mannheim and KIT)

2020-2023	**PI and Co-Coordinator Helmholtz Association (HGF) IPV Pilot-grant** for “Scalable and Interpretable Models for Complex And structured Data (SIMCARD) (500,000€ share of 1,0 Mio) - (joint with Tilmann Gneiting, HITS and Sach Mukherjee, DZNE)
2017-2023	**PI German Science Foundation (DFG)-grant for “**Quantile Methods in complex financial systems**”** (220,000€)
2014-2018	**PI German Science Foundation (DFG)-grant for “**Non- and Semiparametric Methods for Euler Equations**”** (175,000€)
2015-2020	**BMBF-grant** supporting **the chair of Econometrics and Statistics at KIT** (Professorinen-Programm, 350,000€)
2010-2012	**PI and lead project B11** “Non- and Semiparametric Methods for Nonlinear Cointegration Type Models in Euler Equations and Foreign Exchange Rate Markets” **within the Collaborative Research Center 649 “Economic Risk”** (110,000€ share)
2012-2016	**PI and co-lead project B11** “Non- and Semiparametric Techniques for Financial Risk Measurement” (joint with Nikolaus Hautsch) **within the Collaborative Research Center 649 “Economic Risk”** (175,000€ share) – (due to change of university from 1/10/2012 only associated partner)
2011-2015	**Lead PI and coordinator: grant of the German-Franco-University (DFH)** (120,000€) for student scholarships and infrastructure in the double degree program HU Berlin – ENSAE Paris/ENSAI Rennes
2017	Faculty teaching award, Department of Economics and Management, KIT
2009	Oberwolfach Graduate Leibniz Fellow, Mathematical Research Institute Oberwolfach
2008	Selected for the Nobel Laureates Meeting in Lindau
2007	Selected for the Winter Meeting of the Econometric Society in Brussels (Top 10 European Job Market Candidates in Economics)
2006	Scholarship of the German Science Foundation (DFG) for research stay at London School of Economics
2003-2004	PhD-Scholarship of the German Science Foundation (DFG)
2003	Faculty award, Department of Mathematics, Karlsruhe University

■ honors and commissions / positions of trust

2023-	Associate editor, International Journal of Forecasting
2016-	Associate editor, Journal of Time Series Analysis
2023-	Senior Fellow, Rimini Center of Economic Analysis (RCEA)
2023-	Rimini Center of Economic Analysis (RCEA), Time Series Steering Committee member
2019-	Member of the board of the German Economic Association (VFS) (since 2023 directly elected, before as representative Ausschuss für Ökonometrie)
2023-	Scientific Spokesperson, Center of Mathematics in Science, Economics and Engineering (MathSEE) at KIT – founding member of the steering committee since 2019
2024-	Steering Board member, Karlsruhe School of Computational and Data Science (KCDS)
2023-	Vice-Head for Research, Department of Economics and Management, KIT
previous:	
2019- 2023	Chairwoman standing fields committee in Econometrics of the german economic association/ Vorsitz Ausschuss für Ökonometrie im Verein für Socialpolitik
2019- 2023	Member of the board the German Consortium on Statistics (DAGStat)
2017- 2023	Member of the university research council (CRYS) at KIT

■ teaching

lectures at KIT:

Statistics I and II introductory core courses with accompanying Tutorials and R-Lab sessions for Bachelor students (Summer + Fall 2015, 2017, 2019, 2021) + Fall 2024

Economics III - Introduction to Econometrics for Bachelor students (Summer 2015-2021; 2023, 2024, 2025)

Financial Econometrics (Summer 2016, 2018, 2020; Winter 2022, 2023, 2024)

Financial Econometrics II (Winter 2020; Summer 2023, 2024, 2025)

Non- and Semiparametric Methods for Master students (Fall 2015, 2016, 2017, 2019, 2022, 2023)

Applied Econometrics for Master students (Summer 2015, 2016, Fall 2017, 2019)

Seminars: Applied Econometrics (Fall 2015,2016), Topics in Econometrics (Fall 2016, Summer 2017, 2018), Econometrics study group on Statistical Learning (Fall 2015, 2016, Summer 2016, 2017)

lectures at Leibniz University Hannover:

Empirical Economics, introductory core course with accompanying R-Lab Tutorials for Bachelor students (Summer 2013,Fall 2014) [800 students]

Applied Econometric Methods, core course for Master students (Fall 2012 and 2013) [120 students]

Applied Econometrics for Bachelor students (Fall 2012, 2013, 2014)

Financial Econometrics for Bachelor students (Summer 2014)

Non- and Semiparametric Methods for Bachelor students (Fall 2012 and Summer 2013, 2014)

Seminar in Micro-Econometrics for Bachelor students (Summer 2013, 2014)

lectures at HU Berlin and Mannheim University:

Mathematics for PhD and advanced Master Students, course for BDPEMS and DIW graduate school (Humboldt University and DIW, Berlin, Fall 2009, 2010, 2011)

Advanced Econometrics for PhD, Master and Diploma Students (Humboldt University, Berlin, Summer 2009, 2010, 2011and 2012)

Selected Topics in Econometrics: “Econometric Techniques for Assessing Systemic Risk” for PhD and advanced Master Students (Humboldt University, Berlin, Fall 2011)

Selected Topics in Econometrics: “Semiparametric Estimation Methods” for PhD and advanced Master Students (Humboldt University, Berlin, Fall 2010)

Selected Topics in Econometrics: Bootstrap Techniques for PhD and advanced Master Students (Humboldt University, Berlin, Fall 2009)

Selected Topics in Econometrics: Parametric and Nonparametric Methods in Nonlinear Time Series for Master and Diploma Students (Humboldt University, Berlin, Winter 2008/2009)

Econometrics I for PhD Students (Mannheim University, Fall 2008)

Theoretical Econometrics for Diploma and PhD students (Mannheim University, Spring 2008)

Advanced Mathematics for PhD Students (Mannheim University, Fall 2006/2007/2008)

Seminar Nonlinear and Nonparametric Time Series (Mannheim University, Summer 2006)

Undergraduate Statistics (Mannheim University, Fall 2004, Summer and Fall 2005)

■ academic activities

Joint founder and organizer of three forecast hubs for real-time collaborative probabilistic short-term now- and forecasts and their dissemination:

- the German-Polish COVID-19 forecast hub: https://kitmetricslab.github.io/forecasthub/forecast (https://github.com/KITmetricslab/covid19-forecast-hub-de,
- the COVID-19 Nowcasthub: https://covid19nowcasthub.de/ and
- the RESPINOW-Hub http://www.respinowhub.de on infectious diseases

collaborative approach with many (inter)national modeling groups from HZI, DLR, MPI with German and European public health agencies on board (RKI+ ECDC), extensive news coverage (SZ, Zeit, ARD,….), see also scientific output and research grants.

Host for Alexander von Humboldt research award holder Victoria Stodden (01-06/2025)
PI graduate school KCDS (Karlsruhe School for Computational and Data Science), since 2022
PI graduate school HIDSS4Health (KIT- DKFZ Heidelberg), since 2020
Founding spokesperson Institute of Statistics (KIT)
joint organizer and director of the **HKMetrics network** (https://hkmetrics.de) in statistics and econometrics between KIT, Heidelberg University and Mannheim University

program committee memberships:

- Econometric Society European Summer Meeting (ESEM) 2024, Rotterdam – Track chair Econometrics
- Annual meeting of the German Economic Association 2019 and 2023, 2024 –Track chair Econometrics
- Econometric Society European summer Meeting (ESEM) 2018, Cologne
- German Probability and Stochastic Days (GPSD) 2018, Freiburg, section lead chair for Nonparametric and asymptotic statistics, joint with Jan Johannes (Heidelberg University)
- Annual meeting of the German Economic Association 2015

refereeing service:

The Annals of Statistics, Journal of Econometrics, Nature Communications, Econometric Theory, Bernoulli, Journal of Business and Economic Statistics, JASA, Scandinavian Journal of Statistics, Journal of Applied Econometrics, Journal of Financial Econometrics, Electronic Journal of Statistics, The Oxford Bulletin, Journal of Time Series Analysis, Economics Letters, Journal of Statistical Planning and Inference, Journal of Nonparametric Statistics, The Economics of Transition, Statistics and Probability Letters, CSDA, SIAM Journal of Financial Mathematics, Journal of Empirical Finance, International Journal of Forecasting, Journal of Banking and Finance, ECB working paper series, Journal of the Korean Statistical Society, Metrika, International Journal of Information Technology & Decision Making, Journal of Mathematical Finance and Economics, Journal of Financial Analysis, …; DFG, FWF, SNF; numerous reports for hiring committees and promotion decisions.

workshop/session organization:
Inaugural Gaul lecture at KIT featuring Caroline Uhler (10/2021+09/22) (joint with Tilmann Gneiting)

Annual workshops Ausschuss für Ökonometrie (2019-2023)
“Modern Econometrics faces Machine Learning” (joint with Weining Wang, Wolfgang Härdle and Bernd Fitzenberger) at Humboldt University Berlin (07/06/2017)

"Methods and Challenges in Financial Risk Measurement" at Kloster Drübeck (29/04-01/05/2010)

invited session organizer at the joint Conference on Methodological and Computational Statistics (ERCIM) and Computational Financial Econometrics (CFE): London 2015: session “Recent Advances in Time Series”, Pisa 2014: session “Recent theoretical econometric advances in financial risk measurement”, London 2013: session “Recent Advances in Non- and Semiparametric Regression”

faculty/university activities and service:
member of the department council, school of economics, computer science and the social sciences (Bereich II) at KIT (2019-22)

LU Hannover: elected member of the faculty board 04/2013- 03/2015), head of various hiring committees
HU Berlin: coordinator double degree cooperation HU Berlin- ENSAE Paris, ENSAI Rennes (2008-2012)

faculty member of the Berlin Doctoral Program in Economics and Management Science (BDPEMS) and the DIW graduate program (2008-2012)

■ post-docs / PhD-students / students

PostDocs (> placement):
Sebastian Lerch (2021-), Vector Foundation YIG-leader
Rebekka Buse (née Gätjen) (2019-)
Johannes Bracher (2020-23) > W1-TT Professor and Emmy-Noether YIG-leader at KIT
Jörg Urban (2022- 2023) > Postdoc Basel Unversity
Shi Chen (2017-2021) > Researcher Moody’s Analytics
Julia Schaumburg (2013) >> Full Professor, VU Amsterdam

PhD students (> placement):
Julia Schaumburg (2008-2013): Quantile Methods for Financial Risk Management >> prof VU Amsterdam
Peter Malec (2008-2013): Essays on the Econometric Analysis of High-Frequency Data > post-doc U Cambridge
Carsten Bormann (2012-2017): Multivariate Extremes in Financial Markets,> SAP AG, Berlin (Faculty award)
Jörg Urban (2015-2017): Credit risk contagion and arbitrage: Evidence from sovereign bond and credit default swap markets >> post-doc U Basel (Faculty award)
Chong Liang (2013-2018): High-Dimensional Time Series – New Techniques and Applications > Credit Suisse, London (Faculty award)
Rebekka Gätjen (2013-2019): Measuring Dynamic Spillovers in Networks: Sovereign Contagion, Regulation Effects and Market Sectors, (FIRM award – Frankfurt Institute of Risk Management) > postdoc at KIT
Konstantin Görgen (2018- 2022): Statistical Model Selection and Prediction for Non-Standard Data: Insights and Applications in Economics and Finance > Allianz CH

Ongoing: Daniel Wolffram (2021-), Lotta Rüter (2021-), Jieyu Chen (2021-), Friederike Becker (2022-), Lisa Leimenstoll (2024-), Tobias Bodentien (2024-), Osama Warshagha (2024-)

External second supervisor: Karin Stürmer (Heidelberg University, 2016), Shi Chen (HU Berlin, 2017) , Konstantin Heidenreich (KIT, 2018), Onno Kleen (Heidelberg, 2020), Fabian Kächele (KIT, 2023), Friedrich Baumann (KIT, 2024), Jonas Gunklach (KIT, 2024)

Master and Bachelor students
During the last 10 years I have supervised 25 M.Sc and 34 B.Sc theses.

■ personal

citizenship	German
languages	German (mother tongue), English (excellent), French (good)

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[01 - 2025]