Kneib, Thomas

General Information

Name, Title	Kneib, Thomas, Prof. Dr.
Date of Birth	04 December 1976
Gender	Male
Address	Georg-August-Universität Göttingen Faculty of Business and Economics Department of Economics Chair of Statistics Humboldtallee 3 37073 Göttingen
Phone	+49 551 39 25678
Email	tkneib@uni-goettingen.de
ORCID	https://orcid.org/0000-0003-3390-0972
Position	Professor (W3)
Children	1 (*2011); parental leave: 04/2011 – 09/2011

Qualifications and Career

Diploma	1998 – 2003	Statistics, Ludwig-Maximilians-University München, Supervisor: Ludwig Fahrmeir
Dissertation	2003 – 2006	Statistics, Ludwig Maximilian University Munich, Supervisor: Ludwig Fahrmeir
Habilitation	2006 – 2009	Statistics, Ludwig Maximilian University Munich, Supervisor: Ludwig Fahrmeir
Visiting Professor	2007 – 2007	Applied Statistics, University of Ulm
Substitute Professor	2008 – 2009	Statistics, University of Göttingen
Professor (W2)	2009 – 2011	Applied Statistics, University of Oldenburg
Professor (W3)	since 2011	Statistics, University of Göttingen

Engagement in the Research System

2023 – 2026	Editor, Journal of the Royal Statistical Society, Series C (Applied Statistics, with Thordis Thorarinsdottir)
2022 – 2025	Deputy spokesperson of the Deutsche Arbeitsgemeinschaft Statistik (DAGStat)
2020 – 2022	Editor, Advances in Statistical Analysis (with Yarema Okrin)
2020 – 2022	Dean of Research, Faculty of Business and Economics, University of Göttingen
2019 –	Deputy-Spokesperson of the Campus Institute Data Science (CIDAS), University of Göttingen
2018 – 2019	Associate Editor, Journal of the Royal Statistical Society, Series C (Applied Statistics)
2018 – 2020	Dean, Faculty of Business and Economics, University of Göttingen
2017 – 2026	Member of the Executive Committee of the RTG 2300 Enrichment of European beech forests with conifers
2017 – 2018	Dean of Research, Faculty of Business and Economics, University of Göttingen
2016 – 2020	Member of the Executive Committee of the German Statistical Society
2016 – 2018	Spokesperson of Göttingen's Graduate School of Social Sciences (GGG)
2015 – 2018	Member of the Executive Committee of Göttingen's Graduate School of Social Sciences (GGG)

2014 – 2019	Associate Editor, Annals of Applied Statistics
2013 – 2016	Associate Editor, Computational Statistics
2013 – 2014	Mentor in the mentorWIN program (a mentoring program for female PhD students), University of Oldenburg
2012 – 2016	Member of the Executive Committee of the Statistical Modelling Society
2011 – 2023	Spokesperson of the Interdisciplinary Center for Statistics, University of Göttingen
2011 – 2019	Spokesperson of the DFG Research Training Group Scaling Problems in Statistics
2009 – 2016	Associate Editor, Biometrical Journal
2008 – 2019	Associate Editor, Advances in Statistical Analysis
2007 – 2019	Associate Editor, Statistical Modelling

Scientific Results – Category A

Briseño Sanchez, G., Hohberg, M., Groll, A. and Kneib, T. (2020), Flexible instrumental variable distributional regression, *Journal of the Royal Statistical Society, Series A* 183: 1553–1574, http://dx.doi.org/10.1111/rssa.12598.

Greven, S. and Kneib, T. (2010), On the behaviour of marginal and conditional AIC in linear mixed models, *Biometrika* 97: 773–789, http://dx.doi.org/10.1093/biomet/asq042.

Guhl, D., Baumgartner, B., Kneib, T. and Steiner, W.J. (2018), Estimating time-varying parameters in brand choice models: A semiparametric approach, *International Journal of Research in Marketing* 35: 394–414, http://dx.doi.org/10.1016/j.ijresmar.2018.03.003.

Hambuckers, J., Groll, A. and Kneib, T. (2018), Understanding the economic determinants of the severity of operational losses: A regularized generalized Pareto regression approach, *Journal of Applied Econometrics* 33: 898–935, http://dx.doi.org/10.1002/jae.2638.

Hothorn, T., Kneib, T. and Bühlmann, P. (2014), Conditional transformation models, *Journal of the Royal Statistical Society: Series B* 76: 3–27, http://dx.doi.org/10.1111/rssb.12017.

Klein, N., Herwartz, H. and Kneib, T. (2020), Modelling regional patterns of inefficiency: A Bayesian approach to geoadditive panel stochastic frontier analysis with an application to cereal production in England and Wales, *Journal of Econometrics* 214: 513–539, http://dx.doi.org/10.1016/j.jeconom.2019.07.003.

Klein, N., Kneib, T. and Lang, S. (2015), Bayesian generalized additive models for location, scale, and shape for zero-inflated and overdispersed count data, *Journal of the American Statistical Association* 110: 405–419, http://dx.doi.org/10.1080/01621459.2014.912955.

Kneib, T., Silbersdorff, A. and Säfken, B. (2023), Rage against the mean - A review of distributional regression approaches, *Econometrics and Statistics* 26: 99–123, http://dx.doi.org/10.1016/j.ecosta.2021.07.006.

Säfken, B., Kneib, T. and Wood, S. (2024), On the degrees of freedom of the smoothing parameter, *Biometrika* 112: asae052, http://dx.doi.org/10.1093/biomet/asae052.

Scheipl, F., Fahrmeir, L. and Kneib, T. (2012), Spike-and-slab priors for function selection in structured additive regression models, *Journal of the American Statistical Association* 107: 1518–1532, http://dx.doi.org/10.1080/01621459.2012.737742.

Scientific Results – Category B

Brachem, J., Wiemann, P.F.V. and Kneib, T. (2025), Bayesian penalized transformation models: Structured additive location-scale regression for arbitrary conditional distributions, https://arxiv.org/abs/2309.16861.

Dupont, E., Marques, I. and Kneib, T. (2025), Demystifying spatial confounding – A unified analytical framework for covariate effects in spatial regressions, https://arxiv.org/abs/2309.16861, resubmitted to *Environmetrics* after major revisions on March 4th, 2026.

Herp, M., Brachem, J., Altenbuchinger, M. and Kneib, T. (2025), Graphical transformation models, https://arxiv.org/abs/2503.17845.

Riebl, H., Wiemann, P.F.V. and Kneib, T. (2022), Liesel: A probabilistic programming framework for developing semi-parametric regression models and custom Bayesian inference algorithms, https://arxiv.org/abs/2209.10975.

Other Information – Selected Grants

- DFG research project "Stochastic Variational Inference for Latent Gaussian Models" (together with Johannes Söding, Max Planck Institute for Multidisciplinary Sciences, 2024 – 2026)
- DFG Research Training Group RTG 2300 "Enrichment of European Beech Forests with Conifers – Impacts of Functional Traits on Ecosystem Functioning" (2017 – 2026)
- BMBF project "Datenkompetenzen in der Nutztierhaltung – Maschinelles Lernen zur automatischen, robusten Verhaltensklassifikation bei Schweinen (DaNuMa)" (together with Imke Traulsen, Livestock Production Systems, and Ramin Yahyapour, Practical Informatics, 2022 – 2025)
- DFG research project "LIESEL – A Software Framework for Bayesian Semiparametric Distributional Regression" (2022 – 2026)
- DFG Collaborative Research Center CRC 990 "Ecological and Socioeconomic Functions of Tropical Lowland Rainforest Transformation Systems (Sumatra, Indonesia)" (2016 – 2023)
- COST Action CA18138 - Research Innovation and Sustainable Pan-European Network in Peripartum Depression Disorder (2019 – 2022)
- DFG research project "Semiparametric Regression Models for Location, Scale and Shape", (2018 – 2021)
- Project "Daten Lesen Lernen" (Stifterverband and Heinz Nixdorf Stiftung, program "Data Literacy Education")(2019 – 2021)
- BMBF project "Untersuchung der Rolle der Energie- und Ressourcenproduktivität für ökonomisches Wachstum und Entwicklung von politischen Instrumenten zur Eindämmung makroökonomischer Rebound-Effekte (ReCap)" (2017 – 2020)
- Spokesperson, DFG Research Training Group RTG 1644 "Scaling Problems in Statistics" (2010 – 2019)
- DAAD project "Structured Additive Distributional Regression Models: Assessment of Instruments in Psychology, and Applications in Medicine and Education, Acções Integradas Luso-Alemãs" (2017 – 2018, jointly with Bruno de Sousa, Coimbra)
- Ministry for Science and Culture of Lower Saxony (MWK) project "Reducing Poverty Risks in Developing Countries" (2015 – 2018)

- DFG research project "Structured Additive Distributional Regression" (2014 – 2017)
- DAAD project "Extended Structured Additive Regression and its Applications, Acciones Conjuntas Hispano-Alemanas" (2014 – 2015, jointly with Carmen Cadarso Suarez, Santiago de Compostela)
- Institute of New Economic Thinking project "Replication in Economics" (2012 – 2014)
- DFG research project "Structured Additive Quantile and Expectile Regression" (2010 – 2013)
- DFG research project "Bayesian Regularisation for Regression Models with High-Dimensional Predictors" (2007 – 2012)