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Academic career

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| 1988 | PhD (Mathematics), Heidelberg University |
| 1988-1990 | PostDoc, ZI, Mannheim |
| 1990-1994 | PostDoc, Institute of Economics, Bonn University |
| 1994 | Habilitation (Economics), Bonn University |
| 1994-2000 | Associate Professor, of Statistics, Institute of Statistics and CORE, Université Catholique de Louvain, Belgium |
| 2000-2005 | Full Professor of Statistics, Department of Economics, University of Mainz, Ger- many |
| 2005 - | Full Professor of Statistics, Department of Economics, University of Bonn, Ger- many |

Research projects and activities

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| 1994-1998 | Director of the research project “Aspects généraux des méthodes non pa- ramétrique et semi-paramétriques” as part of the “Projet d’Actions de Recherche Concertées: Méthodes semi-et non-paramétriques: problèmes de calcul et app- lications” financed by the Belgian government |
| 1998-2000 | Director of the research project “Estimation de Courbes et Analyse de Données Fonctionnelles” as part of the “Projet d’Actions de Recherche Concertées: Méthodes semi- et non-paramétriques, en tant qu’outil pour analyser des struc- tures complexes de données” financed by the Belgian government; 1994 - 1996: Project “Modèles d’équations structurales et modélisation de covariances” fi- nanced by the Belgian “Fonds de Développement Scientifique” |
| 2002-2005 | Project “Aggregation von dynamischen mikroökonomischen Verhaltensrelatio- nen, insbesondere Konsumfunktionen” (in collaboration with Prof. W. Hilden- brand) financed by the DFG (KN 576/1-1) |
| 2006 -2019 | Principal researcher of the research project “Stochastic Market Models” as part of the “Hausdorff Center for Mathematics” financed by the German government (renewed 2011) |
| 2012 - 2014 | Project “Functional Principle Components for Derivatives and higher Dimensi- ons” (in collaboration with Prof. W. Härdle) financed by the DFG |
| since 2017 | Project “: Some current topics in conditional moment equations models: gene- rated regressors, unknown nuisance functions and panel data ” financed by the DFG (KN 567/5) |
| since 2019 | Principal researcher of the research project “High Dimensionality and Data Ana- lysis” as part of the “Hausdorff Center for Mathematics” financed by the German government |

Professional Activities

Elected Member of the International Statistical Institute; Fellow of the Institute of Mathematical
Statistics; Member of the Verein für Sozialpolitik

2005-2010 associate editor of Computational Statistics; 2008-2010 Associate Editor of Bernoul-
li; 2008-2012 associate editor of the Annals of Statistics; associate editor of Statistica Sinica
(since 2017)

Referee for Annals of Statistics, JASA, JRSSB , Econometrica, Econometric Theory, Biometrika, Journal of Econometrics, Computational Statistics and Data Analysis, and many other journals

Publications

Caroll, C., Müller, H.-G. and Kneip, A. (2019). Cross-component registration for multivariate functional data, with application to growth curves. *Biometrics*, to appear

Arnone, E., Kneip, A., Nobile, F. and Sangalli, L.M. (2020). Some first results on the consistency of spatial regression with partial differential equation regularization. *Statistica Sinica*, to appear

Poß, D., Liebl, D., Kneip, A., Eisenbarth, H., Wager, T.D. and Feldman Barret, L. (2020). Super-consistent estimation of points of impact in nonparametric regression with functional predictors. *Journal of the Royal Statistical Society, Series B*, to appear

Kneip, A., Simar, L. and Wilson, P. (2020). Inference in dynamic, nonparametric models of production: central limit theorems for Malmquist indices. *Econometric Theory*, to appear, doi: 10.1017/s0266466620000237

Delaigle, A., Hall, P., Huang, W. and Kneip, A. (2020). Estimating the covariance of fragmented and other related types of functional data. *Journal of the American Statistical Association*, to appear, <https://doi.org/10.1080/01621459.2020.1723597>

Kneip, A. and Liebl, D. (2020). On the optimal reconstruction of partially observed functional data. *Annals of Statistics*, 48, 1692-1717.

Kneip, A., Merz, M. and Storjohann, L. (2019). Aggregation and labor supply elasticities. *Journal of the European Economic Association*, to appear, <https://doi.org/10.1093/jeea/jvz039>

Wagner, H. and Kneip, A. (2019). Non-parametric registration to low-dimensional function spaces. *Computational Statistics and Data Analysis*, 138, 49-63.

Grith, M, Wagner, H., Härdle, W. and Kneip, A. (2018). Functional principal component analysis for derivatives of multivariate curves. *Statistica Sinica*, 28, 2469-2496.

Kneip, A., Poss, D. and Sarda, P. (2016). Functional Linear Regression with Points of Impact. *Annals of Statistics*, 44, 1-30.

Kneip, A., Simar, L. und Wilson, P. (2016). Testing Hypotheses in Nonparametric Models of Production. *Journal of Business & Economic Statistics*, 34, 435-456

Kneip, A., Simar, L. and Van Keilegom, I. (2015). Frontier estimation in the presence of measurement error with unknown variance. *Journal of Econometrics*, 184, 379-393.

Kneip, A., Simar, L. und Wilson, P. (2015). When bias kills the variance: Central limit theorems for DEA and FDH efficiency scores. *Econometric Theory*, 31, 394-422.

Bada, O. and Kneip, A. (2014). Parameter cascading for panel models with unknown number of unobserved factors: An application to the credit spread puzzle. *Computational Statistics and Data Analysis*, 76, 95-115.

Kneip, A., Sickles, R.C. and Song, W. (2012). A new panel data treatment for heterogeneity in time trends. *Econometric Theory*, 28, 590-628.

Kneip, A. and Sarda, P. (2011). Factor models and variable selection in high dimensional regression analysis. *Annals of Statistics*, 39, 2410-2447.

- Kneip, A., Simar, L. und Wilson, P. (2011). A computationally efficient, consistent bootstrap for inference with non-parametric DEA estimators. *Computational Economics*, 38, 483-515
- Paluch, M., Kneip, A. and Hildenbrand, W. (2011). Individual versus aggregate income elasticities for heterogeneous populations. *Journal of Applied Econometrics*, 27, 847-869.
- Crambes, C., Kneip, A. and Sarda, P. (2009). Smoothing splines estimators for functional linear regression. *Annals of Statistics*, 37, 35-72.
- Benko, M., Härdle, W. und Kneip, A. (2009). Common functional principal components. *Annals of Statistics*, 37, 1-34.
- Kneip, A. and Sickles, R.C. and Song, W. (2009). Panel Data, Factor Models, and the Solow Residual. In *Exploring Research Frontiers in Contemporary Statistics and Econometrics: A Festschrift in Honor of Leopold Simar*, Ingrid Van Keilegom and Paul Wilson (eds.), Springer Publishing: New York, 83-114.
- Kneip, A., Simar, L. und Wilson, P. (2008). Asymptotics and consistent bootstraps for DEA estimators in nonparametric frontier models. *Econometric Theory*, 24, 1663-1697.
- Kneip, A. and Ramsay, J.O. (2008). Combining registration and fitting for functional models. *Journal of the American Statistical Association*, 103, 1155-1165.
- Cardot, H., Crambes, C., Kneip, A. and P. Sarda (2007). Smoothing Splines Estimators in Functional Linear Regression with Errors-in-Variables. *Computational Statistics & Data Analysis*, 51, 4832-4848.
- Hildenbrand, W. and Kneip, A. (2005). Aggregate behavior and microdata. *Games and Economic Behavior*, 50, 3-27.
- Hildenbrand, W. und Kneip, A. (2005). On behavioral heterogeneity. *Economic Theory*, 25, 155-169
- Gijbels, I., Hall, P. und Kneip, A. (2004). Interval and band estimation for curves with jumps. *Journal of Applied Probability*, 41A, 65-79
- Kneip, A., Sickles, R.C. und Song, W. (2004). Functional data analysis and mixed effect models. In *COMPSTAT 2004 - Proceedings in Computational Statistics*; ed. Antoch, J., Springer Verlag, New York, 315-326.
- Kneip, A. und Utikal, K. (2001). Inference for density families using functional principal component analysis. *Journal of the American Statistical Association*, 96, 519-532.
- Kneip, A. und Utikal, K. (2001). Rejoinder to the discussion of "Inference for density families using functional principal component analysis". *Journal of the American Statistical Association*, 96, 540-542.
- Kneip, A. und Utikal, K. (2001). Time trends in the joint distribution of income and age. In *Economic Essays, A Festschrift for Werner Hildenbrand*; ed. Debreu, G., Neuefeind, W., and Trockel, W., Springer Verlag, New York, Heidelberg, 253-274
- Kneip, A. und Hildenbrand, W. (2000). On aggregation of micro-relations: a research program. *Revue Economique*, 51, 435-443.
- Kneip, A., Li, X., MacGibbon, B. und Ramsay, J.O. (2000). Curve registration by local regression. *Canadian Journal of Statistics*, 28, 19-30.
- Kneip, A. (1999). Behavioral heterogeneity and structural properties of aggregate demand. *Journal of Mathematical Economics*, 31, 49-79

- Härdle, W. und Kneip, A. (1999). Testing a regression model when we have smooth alternatives in mind. *Scandinavian Journal of Statistics*, 26, 221-238
- Gijbels, I., Hall, P. und Kneip, A. (1999). On the estimation of jump points in smooth curves. *Annals of the Institute of Statistical Mathematics*, 51, 231-251
- Hildenbrand, W. und Kneip, A. (1999). Demand aggregation under structural stability. *Journal of Mathematical Economics*, 31, 81-109
- Hildenbrand, W., Kneip, A. und Utikal, K. (1999). Une analyse non paramétrique des distributions du revenu et des caractéristiques des ménages. *Revue de Statistique Appliquée*, 47, 39-56
- Kneip, A. (1999). Invited discussion of the paper "Robust functional data analysis" by Locantore, N, Marron, J.S., Simpson, D.G, Triploï, N., Zhang, J.T. and Cohen, K.L. *Test*, 8, 50-54
- Kneip, A., Park, B.U. und Simar, L. (1998). A note on the convergence of nonparametric DEA estimators for production efficiency scores. *Econometric Theory*, 14, 783-793.
- Kneip, A. (1998). Invited discussion of the paper "Smoothing spline models for the analysis of nested and crossed samples of curves" by Brumback, B. and Rice, J. *Journal of the American Statistical Association*, 93, 984-986.
- Engel, J. und Kneip, A. (1996). Invited discussion of the paper "Flexible smoothing with B-splines and penalties" by Eilers, P.H.C, and Brian, D.M. *Statistical Science*, 11, 109-110
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- Gasser, T., Kneip, A., Ziegler, P., Largo, R. und Prader, A. (1991). The dynamics of growth of width in distance, velocity and acceleration. *Annals of Human Biology*, 18, 449-461
- Gasser, T., Kneip, A., Binding, A., Prader, A. und Molinari, L. (1991). The dynamics of linear growth in distance, velocity and acceleration. *Annals of Human Biology*, 18, 187-205
- Gasser, T., Kneip, A., Ziegler, P., Largo, R. und Prader, A. (1990). A method for determining the dynamics and intensity of average growth. *Annals of Human Biology*, 17, 459-474
- Kneip, A. und Pfeiffer-Kurda, M. (1990). Anmerkungen zu "Gauquelins Planetenhypothese: Stein des Anstoßes oder Prüfstein der Vernunft" von Suitbert Ertel. *Psychologische Rundschau*, 23, 235-237
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