

David Preinerstorfer

Personal Data

Born November, 1985
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Academic Appointments

2024 - Professor of Statistics and Econometrics, WU Vienna
Institute for Statistics and Mathematics
2021 - 2024 Associate Professor, University of St.Gallen
School of Economics and Political Science
Director at the Swiss Institute for Empirical Economic Research
2017 - 2021 Assistant Professor with tenure, Université libre de Bruxelles
European Center for Advanced Research in Economics and Statistics
2016 - 2017 Post Doc, Aarhus University
Center for Research in Econometric Analysis of Time Series (CREATES)
2015 - 2016 Post Doc, University of Vienna
Department of Statistics and Operations Research
2011 - 2015 Prae Doc, University of Vienna
Department of Statistics and Operations Research

Education

2011 - 2015 PhD in Statistics and Operations Research.
2009 - 2011 Master in Statistics.
2006 - 2009 Bachelor in Statistics.
2005 - 2010 Mag.rer.nat. in Psychology.

All degrees were obtained at the University of Vienna.

Publications

- PÖTSCHER, B. M. and PREINERSTORFER, D. (2024+). Valid heteroskedasticity robust testing. *Econometric Theory*, to appear
- KOCK, A. B., PREINERSTORFER, D. and VELIYEV, B. (2024+). Functional sequential treatment allocation with covariates. *Econometric Theory*, to appear
- KOCK, A. B. and PREINERSTORFER, D. (2024c). A remark on moment-dependent phase transitions in high-dimensional Gaussian approximations. *Statistics & Probability Letters*, **211**
- PÖTSCHER, B. M. and PREINERSTORFER, D. (2024). A comment on: “A modern Gauss-Markov theorem”. *Econometrica*, **92** 913–924
- KOCK, A. B. and PREINERSTORFER, D. (2024d). Superconsistency of tests in high dimensions. *Econometric Theory*, **40** 688–704
- PREINERSTORFER, D. (2023). How to avoid the zero-power trap in testing for correlation. *Econometric Theory*, **39** 1292–1324
- PÖTSCHER, B. M. and PREINERSTORFER, D. (2023). How reliable are bootstrap-based heteroskedasticity robust tests? *Econometric Theory*, **39** 789–847
- KOCK, A. B. and PREINERSTORFER, D. (2023). Consistency of p -norm based tests in high dimensions: characterization, monotonicity, domination. *Bernoulli*, **29** 2544–2573
- KOCK, A. B., PREINERSTORFER, D. and VELIYEV, B. (2023). Treatment recommendation with distributional targets. *Journal of Econometrics*, **234** 624–646
- KOCK, A. B., PREINERSTORFER, D. and VELIYEV, B. (2022). Functional sequential treatment allocation. *Journal of the American Statistical Association*, **117** 1311–1323
- BACHOC, F., PREINERSTORFER, D. and STEINBERGER, L. (2020). Uniformly valid confidence intervals post-model-selection. *Annals of Statistics*, **48** 440–463
- KOCK, A. B. and PREINERSTORFER, D. (2019). Power in high-dimensional testing problems. *Econometrica*, **87** 1055–1069
- PÖTSCHER, B. M. and PREINERSTORFER, D. (2019). Further results on size and power of heteroskedasticity and autocorrelation robust tests, with an application to trend testing. *Electronic Journal of Statistics*, **13** 3893–3942
- PÖTSCHER, B. M. and PREINERSTORFER, D. (2018). Controlling the size of autocorrelation robust tests. *Journal of Econometrics*, **207** 406–431
- PREINERSTORFER, D. (2017). Finite sample properties of tests based on prewhitened non-parametric covariance estimators. *Electronic Journal of Statistics*, **11** 2097–2167
- PREINERSTORFER, D. and PÖTSCHER, B. M. (2017). On the power of invariant tests for hypotheses on a covariance matrix. *Econometric Theory*, **33** 1–68
- PREINERSTORFER, D. and PÖTSCHER, B. M. (2016). On size and power of heteroskedasticity and autocorrelation robust tests. *Econometric Theory*, **32** 261–358

RESCHENHOFER, E., PREINERSTORFER, D. and STEINBERGER, L. (2013). Non-monotonic penalizing for the number of structural breaks. *Computational Statistics*, **28** 2585–2598

PREINERSTORFER, D. and FORMANN, A. K. (2012). Parameter recovery and model selection in mixed Rasch models. *British Journal of Mathematical and Statistical Psychology*, **65** 251–262

Submitted Papers

KOCK, A. B. and PREINERSTORFER, D. (2024b). Regularizing discrimination in optimal policy learning with distributional targets. arXiv: 2401.17909

KOCK, A. B. and PREINERSTORFER, D. (2024a). Enhanced power enhancements for testing many moment equalities: Beyond the 2- and ∞ -norm. arXiv: 2407.17888

R-Packages

PREINERSTORFER, D. (2021). hrt: Heteroskedasticity robust testing. *CRAN*

PREINERSTORFER, D. (2020). wbsd: Wild bootstrap size diagnostics. *CRAN*

PREINERSTORFER, D. (2016). acrt: Autocorrelation robust testing. *CRAN*

PREINERSTORFER, D. (2011). mRm: An R package for conditional maximum likelihood estimation in mixed Rasch models. *CRAN*

Teaching

University of St.Gallen: Advanced Econometrics, Data Analytics I: Statistik (VWL), Data Analytics II: Empirische Wirtschaftsforschung, Data Analytics and Causal Inference, Machine Learning, Recent Advances in the Econometrics of Optimal Policy Design, and Topics in Econometrics and Finance.

Université libre de Bruxelles: Introduction to Econometrics, Graduate Econometrics I, and Graduate Econometrics III.

Aarhus University: Economic Forecasting.

University of Vienna: Linear Models. Exercise classes in: Asymptotic Statistics, Statistics for Economists, Statistical Inference, Introduction to Probability, Analysis. Teaching assistant for the courses Advanced Calculus and Statistics for Business Students.

Awards and Grants

2024 Econometric Theory Multa Scripsit Award.

2022 Adolphe Wetrems Prize for Mathematics and Physics awarded by the Classe des Sciences of the Royal Academy of Belgium.

- 2018 - 2023** Advanced ARC grant (Action de Recherche Concertée avancée) of the Communauté Française de Belgique, “Robust and Efficient Solutions to the Big Data Challenge”, with Davy Paindaveine and Thomas Verdebout.
- 2016** Schrödinger Fellowship, Austrian Science Fund, Grant J-3870, “Powerful Autocorrelation Robust Testing in Finite Samples” (declined).
- 2016** Publication Awards, awarded by the Faculty of Business, Economics and Statistics (University of Vienna) for outstanding publications, for the articles Preinerstorfer and Pötscher (2016) and Preinerstorfer and Pötscher (2017).
- 2015** Austrian Science Fund, Grant P 27398, “Autocorrelation Robust Testing in Regression Models”, Co-author of project proposal.
- 2015** Promotion Award, awarded by the Austrian Statistical Society for the best PhD thesis in Theoretical Statistics 2015.
- 2006 - 2011:** Scholarships for academic excellence, University of Vienna.

Conferences and Seminars

- 2023** TMU International Conference on Statistical Modeling and Inference 2023, Tokyo
 Workshop on Bandits and Statistical Tests, University of Potsdam
 Seminar, WU Vienna
 Bergamo-Waseda Workshop on Inference for Stochastic Process and Applications, University of Bergamo
- 2022** Workshop “Aarhus Workshop in Econometrics I”, Aarhus
 International Symposium on Nonparametric Statistics 2022, Paphos
 MACD Workshop, Brussels
 Seminar, University of Bonn
 Waseda International Symposium “Topological Data Science, Causality, Analysis of Variance & Time Series”, Waseda University
- 2021** Econometrics Seminar, University of Wisconsin-Madison
 Seminar, Department of Economics, Durham University
 Seminar, Department of Economics, Ohio State University
 Workshop “High Voltage Econometrics 2”, University of Zürich
 Seminar, University of Vienna
 Seminar, Statistics Department, TU Vienna
 Seminar, SEPS, University of St. Gallen
 Waseda International Symposium “Topological Data Science, Causality & Time Series Analysis”, Waseda University
- 2019** Seminar, Statistics Department, Ulm University
 Statistics and Econometrics Seminar, KU Leuven

- Econometrics, Finance and Statistics Seminar, UC Louvain
Seminar, Department of Economics, University of Regensburg
- 2018** CFE 2018, Pisa
26th Annual Meeting of the Royal Statistical Society of Belgium
“High-Voltage Econometrics” Workshop, Palermo
Econometric Society European Meeting, Cologne
Workshop “Model Selection Regularization and inference”, Vienna
Statistics Colloquium, TU Vienna
Workshop “High-dimensional statistics and random structures”, Barcelona
Nuffield Econometrics Seminar, University of Oxford
Workshop: Post-selection Inference and Multiple Testing, Toulouse
- 2017** CFE 2017, London
Joint Statistics Seminar UCL/ULB, Université libre de Bruxelles
New Developments in Econometrics and Time Series, Rome
Econometric Society Asia Meeting, Hong Kong
Statistics and Econometrics Seminar, Université libre de Bruxelles
Humboldt-Aarhus-Xiamen Workshop, Aarhus
- 2016** Tinbergen Econometrics Seminar, Amsterdam
10-Year Anniversary Meeting of CREATES, Sandbjerg Manor
Seminar, ECARES, Université libre de Bruxelles
Seminar, CREATES, Aarhus University
Seminar, Department of Economics, University Carlos III Madrid
- 2015** NBER-NSF Time Series Conference 2015, Vienna (poster presentation)
European Young Statisticians Meeting, Prague
Joint Statistical Meetings 2015, Seattle
- 2014** Joint Econometrics and Statistics Seminar, LSE
NBER-NSF Time Series Conference 2014, St. Louis (poster presentation)
- 2013** CFE 2013, London
29th European Meeting of Statisticians, Eötvös Lorand University, Budapest
- 2012** Econometrics Seminar, Institute for Advanced Studies, Vienna
Statistical Inference in Complex/High-Dimensional Problems, Vienna

Refereeing and Editorial Activities

American Economic Review, Annals of Statistics, Austrian Journal of Statistics, Bernoulli, Econometrica, Econometric Reviews, Econometrics, Econometric Theory, International Journal of Forecasting, Journal of Econometrics, Journal of Educational Measurement, Journal of Statistical Planning and Inference, JASA, JRSSB, Review of Economics and Statistics, Statistical Papers, Statistics and Probability Letters, Test, Quantitative Economics.

Since September 2024 I am an Associate Editor for Econometric Theory.

Membership

Econometric Society

Last updated on September 3, 2024.