

CURRICULUM VITAE
PATRIK GUGGENBERGER
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Contact information:

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Employment:

Professor, Liberal Arts Research Professor, Department of Economics, Penn State University, July 2013-
Associate Professor (with tenure), Endowed Robert F. Engle Chair in Econometrics, Department of Economics, UCSD, 2009-2013.

Assistant Professor, Department of Economics, UCLA, 2003-2009.

Visiting Professor at European University Institute, Fernand Braudel Senior Fellow, Florence, Italy, September 2019- June 2021.

Visiting Assistant Professor, Department of Economics, Harvard University, Fall 2007; Department of Economics, Yale University, Spring 2008.

Education:

• **Ph.D. Economics**, Yale University, 5/2003 (*with distinction*). Thesis: “*Econometric Essays on Generalized Empirical Likelihood, Long-memory Time Series, and Volatility*”. Advisor: Donald W. K. Andrews (Yale University).

• **Diplom Mathematics**, University of Bonn (Germany), 8/1998 (*with distinction*). Thesis: “*The $\bar{\delta}$ -equation on unbounded domains in C^n . A first approach*”. Advisors: Ingo Lieb (Bonn University) and Michael Range (SUNY Albany).

• **DEA Mathematics**, Paris VI, Pierre et Marie Curie (France), 9/1996 (*mention bien*). Thesis: “*Le problème de parité dans les matroïdes*”. Advisor: Michel Las Vergnas (Paris VI).

Research fields:

Econometric Theory

Publications:

- 1) “A powerful subvector Anderson-Rubin test in linear instrumental variables regression with conditional heteroskedasticity” (with Frank Kleibergen and Sophocles Mavroeidis), forthcoming at *Econometric Theory*.
- 2) “A test for Kronecker product structure covariance matrix” (with Frank Kleibergen and Sophocles Mavroeidis), 2023, *Journal of Econometrics* 233(1), 88-112.
- 3) “Generic Results for Establishing the Asymptotic Size of Confidence Intervals and Tests” (with Donald W.K. Andrews and Xu Cheng), 2020, *Journal of Econometrics* 218(2), 496-531.
- 4) “Identification- and Singularity- Robust Inference for Moment Condition Models” (with Donald W.K. Andrews), 2019, *Quantitative Economics* 10(4), 1703-1746.
- 5) “A more powerful subvector Anderson Rubin test in linear instrumental variables regression” (with Frank Kleibergen and Sophocles Mavroeidis), 2019, *Quantitative Economics* 10(2), 487-526.

- 6) "Asymptotic Size of Kleibergen's LM and Conditional LR Tests for Moment Condition Models" (with Donald W.K. Andrews), 2017, *Econometric Theory* 33(5), 1046-1080.
- 7) "A Conditional-Heteroskedasticity-Robust Confidence Interval for the Autoregressive Parameter" (with Donald W.K. Andrews), 2014, *Review of Economics and Statistics* 96(2), 376-381.
- 8) "On the Asymptotic Sizes of Subset Anderson-Rubin and Lagrange Multiplier Tests in Linear Instrumental Variables Regression" (with Frank Kleibergen, Sophocles Mavroeidis, and Linchun Chen), 2012, *Econometrica* 80(6), 2649-2666.
- 9) "Distortions of Asymptotic Confidence Size in Locally Misspecified Moment Inequality Models" (with Federico Bugni and Ivan Canay), 2012, *Econometrica* 80(4), 1741-1768.
- 10) "GEL Statistics Under Weak Identification" (with Joaquim J.S. Ramalho and Richard J. Smith), 2012, *Journal of Econometrics* 170(2), 331-349.
- 11) "Asymptotics for LS, GLS, and Feasible GLS Statistics in an AR(1) Model with Conditional Heteroskedasticity" (with Donald W.K. Andrews), 2012, *Journal of Econometrics* 169(2), 196-210.
- 12) "On the Asymptotic Size Distortion of Tests When Instruments Locally Violate the Exogeneity Assumption", 2012, *Econometric Theory* 28(2), 387-421.
- 13) "On the Size Distortion of Tests after an Overidentifying Restrictions Pretest" (with Gitanjali Kumar), 2012, *Journal of Applied Econometrics* 27(7), 1138-1160.
- 14) "A Note on the (In)Consistency of the Test of Overidentifying Restrictions and the Concepts of True and Pseudo-True Parameters", 2012, *Economics Letters* 117(3), 901-904.
- 15) "A Note on the Relation between Local Power and Robustness to Misspecification", 2012, *Economics Letters* 116(2), 133-135.
- 16) "Applications of Subsampling, Hybrid, and Size-Correction Methods" (with Donald W.K. Andrews), 2010, *Journal of Econometrics* 158(2), 285-305.
- 17) "The Impact of a Hausman Pretest on the Size of a Hypothesis Test: the Panel Data Case", 2010, *Journal of Econometrics* 156(2), 337-343.
- 18) "Asymptotic Size and a Problem With Subsampling and With the m out of n Bootstrap" (with Donald W.K. Andrews), 2010, *Econometric Theory* 26(2), 426-468.
- 19) "The Impact of a Hausman Pretest on the Asymptotic Size of a Hypothesis Test", 2010, *Econometric Theory* 26(2), 369-382.
- 20) "Hybrid and Size-Corrected Subsampling Methods" (with Donald W.K. Andrews), 2009, *Econometrica* 77(3), 721-762.
- 21) "Incorrect Asymptotic Size of Subsampling Procedures Based on Post-Consistent Model Selection Estimators" (with Donald W.K. Andrews), 2009, *Journal of Econometrics* 152(1), 19-27.
- 22) "Validity of Subsampling and "Plug-in Asymptotic" Inference for Parameters Defined by Moment Inequalities" (with Donald W.K. Andrews), 2009, *Econometric Theory* 25(3), 669-709.
- 23) "Generalized Empirical Likelihood Tests in Time Series Models With Potential Identification Failure" (with Richard J. Smith), 2008, *Journal of Econometrics* 142(1), 134-161.
- 24) "Asymptotics for Stationary Very Nearly Unit Root Processes" (with Donald W.K. Andrews), 2008, *Journal of Time Series Analysis* 29(1), 203-212.
- 25) "Specification Testing Under Moment Inequalities" (with Jinyong Hahn and Kyoo il Kim), 2008, *Economics Letters* 99(2), 375-378.
- 26) "Finite Sample Evidence Suggesting a Heavy Tail Problem of the Generalized Empirical Likelihood Estimator", 2008, *Econometric Reviews* 27(4), 526-541. [A preliminary version was published as "Monte-Carlo Evidence Suggesting a No Moment Problem of the Continuous Updating Estimator", 2005, *Economics Bulletin* 3(13), 1-6.]
- 27) "Bias-Reduced Log-Periodogram and Whittle Estimation of the Long-Memory Parameter Without Variance Inflation" (with Yixiao Sun), 2006, *Econometric Theory* 22(5), 863-912.
- 28) "Finite Sample Properties of the 2-Step Empirical Likelihood Estimator" (with Jinyong Hahn), 2005, *Econometric Reviews* 24(3), 247-263.
- 29) "Generalized Empirical Likelihood Estimators and Tests under Partial, Weak and Strong Identification" (with Richard J. Smith), 2005, *Econometric Theory* 21(4), 667-709.

- 30) “A Bias-Reduced Log-Periodogram Regression Estimator for the Long-Memory Parameter” (with Donald W. K. Andrews), 2003, *Econometrica* 71(2), 675-712.
- 31) “Efficiency Properties of Labor Taxation in a Spatial Model of Restricted Labor Mobility” (with Ashok Kaul and Martin Kolmar), 2002, *Regional Science and Urban Economics* 32(4), 447-473.

Papers under submission:

- 32) “Minimax regret treatment rules with finite samples when a quantile is the object of interest” (with Nihal Mehta and Nikita Pavlov), August 2023.
- 33) “A note on minimax regret rules with multiple treatments in finite samples” (with Haoning Chen), August 2023, revised and resubmitted at *Econometric Theory*.

Other publications:

Review of “*Identification and Inference for Econometric Models: A Festschrift in Honor of Thomas J. Rothenberg*”, edited by Donald W.K. Andrews and James H. Stock, 2010, *Econometric Reviews* 29(1), 99-105.

Professional activities:

- Co-Editor of *Econometric Theory* (2017-), Associate Editor (2010-2016)
- Associate Editor of *Journal of Business & Economic Statistics* (2018-end of 2027), *Journal of Econometrics* (2015-2027), and *Econometrics Journal* (2007-2025).
- Associate Editor of *Econometrica* (2011-4). Guest Co-Editor for *Econometrica* (2012-4).
- Referee for *Annals of Statistics*, *Advances in Statistical Analysis*, *Biometrika*, *Computational Statistics and Data Analysis*, *Econometrica*, *Econometric Reviews*, *Econometrics*, *Econometrics Journal*, *Econometric Theory*, *Economics Bulletin*, *Economics Letters*, *Empirical Economics*, *Journal of Applied Econometrics*, *Journal of Business and Economic Statistics*, *Journal of Econometrics*, *Journal of Multivariate Analysis*, *Journal of Nonparametric Statistics*, *Journal of Political Economy*, *Journal of Productivity Analysis*, *Journal of Statistical Planning and Inference*, *Journal of the American Statistical Association*, *Journal of the Royal Statistical Society*, *Journal of Time Series Analysis*, *National Science Foundation*, *Oxford Bulletin of Economics and Statistics*, *Quantitative Economics*, *Review of Economics and Statistics*, *Review of Economic Studies*, and *Statistica Neerlandica*.
- Membership: Econometric Society
- Member of program committee for
North American Summer Meeting of the Econometric Society, St. Louis, 2017
Econometric Society World Congress, Montreal, 2015,
35th EC2 Conference, December 2024, Amsterdam,
Reviewer for Verein für Socialpolitik: Annual Conference 2020: Gender Economics.
- Graduate Students Admissions Committee at UCLA 2004/5, 2005/6, 2006/7, UCSD 2010/11, 2011/12, Penn State 2014/5, 2015/6.
- Organizer of Econometrics Seminar at UCLA 2004/5, 2005/6, 2006/7, 2008/9, UCSD Winter 2012, Penn State Spring 2014, Fall 2016, 2021.
- Conference organization: Frontiers of Theoretical Econometrics, in celebration of Donald Andrews’ 60th birthday, 8/1-2/2015, Konstanz University.
- Member of the personnel committee, 2016-8 (chair in 2017-8) 2021-3 (chair in 2022-23), and 2024 (chair) Penn State.
- Chair of Policy, Evaluation, and Planning Committee, 2014-6, Penn State.
- Reviewer for the RGSO dissertation support competitions, 2015-2019, Penn State.
- Ph.D. thesis committee member (in brackets year of graduation and current position) of:
At UCLA: Alberto Plazzi (2010, University of Lugano);

At UCSD: David Kaplan (2013, University of Missouri); Linchun Chen (2014, Compass Lexecon);
At Penn State: Bulat Gafarov (2017, UC Davis Ag-Econ; co-advisor); Xian Li (2018, Shanghai University of Finance and Economics, since 2024 at ByteDance); Shengbo Zhu (2020, School of Business, Renmin University); Chen Zhang (advisor, 2021, Afiniti), Gyu Rho (2022, Data Scientist | Scentre Group); Junpeng Hu (ongoing), Nihal Mehta (ongoing), Nikita Pavlov (ongoing), Ivan Sidorov (ongoing), and Han Xu (ongoing).

Master thesis supervisor: Grigory Franguridi (2016), Aizhan Sapar (2021), Li-Chien Chan (2024).

External PhD committee member at EUI: Matthias Schmidtblaicher (2020, QuantCo).

Honors and awards:

- Fellow of the *Journal of Econometrics*, 2021

- Fellow of the IAAE (since 2019)

- Econometric Theory Multa Scripsit Award 2010

- Liberal Arts Research Professor, Penn State University, 2013

- Inaugural holder of the endowed Robert F. Engle Chair in Econometrics, Department of Economics, UCSD 2009

- Undergraduate Teaching Award, 2015 and 2017 at Penn State

Fellowships and grants:

- Alfred P. Sloan Foundation Fellowship 2009-2011

- NSF grant SES-1462707, “Robust Inference for Nonlinear Moment Condition Models with Possible Weak Identification”, 2015-2018, PI

- NSF grant SES-1021101 (later: 1326827), “On the Relative Robustness of the Size of Tests to Local Model Violations”, 2010-2014, PI

- NSF grant SES-0748922 (later: 1022929), “Risk Properties of Estimators and the Size of Tests in Discontinuous Models”, 2008-2010, PI

- Faculty Research Grant, UCLA, 2005, 2006

- Carl Arvid Anderson Prize Fellowship in Economics, Yale University, 2002-2003

- Enders Fellowship, Yale University, Summer 2002

- Dissertation Fellowship, Yale University, 2002

- Scholarship German Merit Foundation (Studienstiftung des deutschen Volkes) 1992-2002, ERP stipend 2000-2002

- Erasmus Stipend, 1995-1996

Teaching:

At Penn State:

- First semester Ph.D. Course in Econometrics (Fall 2015-8, 2020-1)

- Second semester Ph.D. Course in Econometrics (Spring 2023, 2024)

- Ph.D. Topics Course in Econometrics (Fall 2013-4)

- Undergraduate Course: Linear regression model (Spring 2014-6)

- Undergraduate Course: Auction Theory (Spring 2017)

- Undergraduate Course: Labor Economics (Spring 2018, 2019, 2021-2)

- Undergraduate Course: Environmental Economics (Spring 2022, Fall 2022-2024)

At UCSD:

- Ph.D. Topics Course in Econometrics (Spring 2010, Fall 2012)
- Second Year Ph.D. Course in Econometrics: Nonparametrics and Resampling (Fall 2012)
- Undergraduate Course: Linear regression model (Spring 2010-3)

At UCLA:

- First Year Ph.D. Course in Econometrics: Extremum Estimators, Bootstrap, Stationary Time Series (Spring 2004,5,7,9)
- Second Year Ph.D. Course in Econometrics: Topics Course (Stationary and Nonstationary Time Series, Resampling Methods, Size of Tests) (Spring 2004,5,7,9, Fall 2005,6)
- Undergraduate Course: Statistics for Economists (Fall 2005,6, Spring 2007) and Linear regression model (Spring 2009)

At EUI:

- Ph.D. Reading Group on “Uniformly valid inference and big data” (4-5/2020)

At Konstanz University: Mini graduate courses: 4/28-30/2008 and 7/20-24/2015

At Yale University: First Year Ph.D. Course in Econometrics: Econometrics II (Spring 2008)

At SUNY Albany: Undergraduate Course: Introduction to Calculus (Spring 1998)

Seminar presentations:

- 2024 Konstanz, Frankfurt, Heidelberg, Regensburg; upcoming: NTU, SMU, NUS, Macquarie University, University of Sydney, UNSW, Brisbane, UCL, Exeter, Cambridge, Manchester, Oxford
- 2023 Freiburg, UC Davis, UC Riverside, Colorado Boulder, SUNY Stony Brook, McGill, München (Ludwig-Maximilians-Universität)
- 2022 Centre for Econometrics and Business Analytics at St. Petersburg University (online)
- 2021 Brisbane (online), Aarhus (online)
- 2020 Manchester, Toulouse (online), Bologna (online), Zürich (online), EUI (online)
- 2019 Pompeu Fabra, Singapore (NUS and SMU), Tilburg, Rotterdam, Amsterdam, Florence (EUI), Bristol, Paris (PSE)
- 2018 Regensburg, Tübingen, Indiana, Mannheim
- 2017 Oxford, Yale University, Northwestern, Berlin (Humboldt), Köln, Konstanz, McGill, Zürich, Kiel University
- 2016 University of British Columbia, Bremen, Luxembourg, Rome (EIEF), Geneva, Lugano
- 2015 University of Montreal, Manchester, UCL, Pompeu Fabra, University of Washington Seattle, Köln, Madison Wisconsin
- 2014 Brown, Michigan, NYU, Maryland, Hebrew University Jerusalem, Konstanz, Hannover, Princeton, Strasbourg
- 2013 USC, Frankfurt, ETH Zürich, University of British Columbia, Pittsburgh, Syracuse, Boston University, Freiburg
- 2012 Georgetown, Konstanz, Maryland, SUNY Albany, John Hopkins, Harvard/MIT, Boston University, Texas A&M, Austin, Penn State
- 2011 Amsterdam (Tinbergen Institut), Rice, University of Montreal, Toronto
- 2010 UCSD, UCSD (Math), Frankfurt, Regensburg, Xiamen (Wang Yanan Institute for Studies in Economics), UC Riverside, Caltech, Penn, Penn State, NCSU, Chicago GSB
- 2009 UCSD, Freiburg, Zürich, UCLA, Konstanz, Toulouse, Simon Fraser, NYU

- 2008 Cornell, Rochester, Syracuse, Brown, Princeton, UCLA, UCSB, Yale, Maryland, Georgetown, Washington St. Louis, USC, Cornell, UC Berkeley, Michigan, Michigan State, Texas A&M, Northwestern, Duke
- 2007 München (Ludwig-Maximilians-Universität), Beijing (China Center for Economic Research), Beijing (Guanghua School of Management), Xiamen (Wang Yanan Institute for Studies in Economics), Hongkong HKUST, Singapore Management University, Cambridge, Boston College, Madison Wisconsin, Harvard, Minnesota, MIT, Boston University, ITAM, SUNY Albany, Harvard/MIT, Columbia, Tel Aviv (Statistics)
- 2006 Penn, Cornell, Frankfurt, Technion Israel Institute of Technology, IWH Halle, Vanderbilt, Pittsburgh, Penn State, University of Hawai'i at Manoa, Taipei (Institute of Economics, Academia Sinica), Seoul National University, University of Tokyo, UC Davis, ETH Zürich, Mannheim, Bonn
- 2005 Stanford, University of Montreal, Technion Israel Institute of Technology, Berlin (Humboldt), IWH Halle, Toronto, Michigan, USC, NYU Stern, University of Washington Seattle, University of British Columbia, Bonn, Konstanz
- 2004 Laval, UC Riverside, UCSD, UC Irvine, UC Davis, UC Berkeley, Darmstadt, Bonn, Frankfurt
- 2003 Chicago GSB, Chicago, Princeton, Penn, UCLA, USC, Penn State, Pittsburgh, Texas A&M, Austin, Madison Wisconsin, Rochester, Mannheim, Rice, Brown, Harvard/MIT, SUNY Albany (Math), Maryland, NYU
- 2002 Yale, Konstanz

Conferences: (selection)

- Munich Econometrics Workshop 7/18-19/2024
- Rochester conference in Econometrics, 5/1-2/2024
- New York Camp Econometrics, Lake Placid, 4/26-28/2024

- Penn State-Cornell Econometrics and Industrial Organization Conference, 10/2023, Penn State.
- Advances in Econometrics Conference and Festschrift in Honor of Joon Y. Park, 9/2023, Bloomington.

- Penn State-Cornell Econometrics and Industrial Organization Conference, 9/30-10/1/2022, Cornell.
- Cowles Foundation for Research in Economics, Conference on Econometrics, 6/10/2022, New Haven.
- North American Summer Meeting of the Econometric Society, 6/10-13/2021, Montreal. (online)

- Advances in Econometrics, Institute for Fiscal Studies, 12/7-8/2018, London.
- A Celebration of Peter Phillips' Forty Years at Yale, 10/19-20/2018, Yale University.
- Penn State-Cornell Econometrics and Industrial Organization Conference, 10/5-6/2018, Penn State.
- 4th Konstanz-Lancaster workshop on Finance and Econometrics, 7/30-31/2018, Konstanz University.
- "New Frontier in Econometrics", 6/15-17/2018, UConn Stamford.

- Penn State-Cornell Econometrics and Industrial Organization Conference, 9/15-16/2017, Cornell.
- 12th TI Conference on Inference Issues in Econometrics, 5/19-20/2017, Amsterdam.
- Verein fuer Socialpolitik, 2/24-26/2017, Rauschholzhausen.

- Recent advances in Econometrics, 6/28-29/2016, Toulouse.
- Econometrics conference, 4/1/2016, University of Iowa.
- Deutsche Arbeitsgemeinschaft Statistik, 3/14-18/2016, Göttingen.
- Econometric Society, Winter Meetings, 1/3-5, 2016, San Francisco.

- Penn State-Cornell Econometrics and Industrial Organization Conference, 10/23-24/2015, Cornell.

- Frontiers of Theoretical Econometrics, in celebration of Donald Andrews' 60th birthday, 8/1-2/2015, Konstanz University.
- New York Camp Econometrics X, 4/10-12/2015, Sagamore Resort.
- Penn State-Cornell Econometrics and Industrial Organization Conference, 9/12-13/2014, Penn State, State College.
- Likelihood and Simplicity: Considerations on Model Selection, 1/7-9/2014, Bar-Ilan campus, Tel Aviv.
- Cowles Summer Econometrics Conference, 6/5-6/2013, Yale University.
- North American Winter Meetings of the Econometric Society, 1/4-6/2013, San Diego.
- ISNPS conference, 6/15-19/2012, Chalkidiki, Greece.
- Inference in Nonstandard Problems, 6/15-16/2012, Princeton University.
- Cowles Summer Econometrics Conference, 6/11-12/2012, Yale University.
- Identification and Inference in Microeconometrics, 3/23-24/2012, Nashville.
- Conference in Honor of Halbert L. White, Jr. - Causality, Prediction, and Specification Analysis: Recent Advances and Future Directions, 5/6-7/2011, San Diego.
- Gumbel-Lecture, Statistics Week 2010, 9/13-17/2010, Nürnberg.
- 10th World Congress of the Econometric Society, Shanghai, 8/17-21/2010.
- UK Econometric study group meeting, Bristol 7/9-11/2009.
- Summer Econometrics conference, Tsinghua University, Beijing, 5/31-6/1/2009.
- Conference on Bootstrap and Numerical Methods in Time Series, Granger Centre, Nottingham, 9/10-11/2008.
- Workshop on model selection (and related methods), Vienna, 7/24-26/2008.
- Far Eastern and South Asian Meeting of the Econometric Society, Singapore 7/16-18/2008.
- Conference in honor of Peter C.B. Phillips, Singapore Management University, 7/14-15/2008.
- Cowles Foundation Summer Conference, New Haven, 6/9-11/2008.
- Inference and Tests in Econometrics, A Tribute to Russell Davidson, GREQAM conference, Marseilles, France, 4/25-26/2008.
- Econometric Society, North American Winter Meetings, New Orleans, 1/4-6/2008.
- Mini-conference in Econometrics, San Diego, 7/3/2007.
- Cowles Econometrics Conference "Looking to the Future: A New Generation of Econometricians", New Haven, 6/11-12/2007.
- North American Meeting of the Econometric Society, Chicago, 1/5-7/2007.
- NBER-NSF Time Series Conference, Montreal, 9/29-30/2006.
- Far Eastern Meeting of the Econometric Society, Beijing, 7/9-12/2006.
- Econometric Society, North American Winter Meeting, Boston, 1/6-8/2006.
- CIREQ, Montreal, 12/2-3/2005.
- Conference on Information and Entropy Econometrics, American University, Washington D.C., 9/23-25/2005.
- Econometric Society World Congress at UCL, London, 8/18-24/2005.
- Conference of Econometrics and Mathematical Economics of the NSF/NBER on advances in Microeconometrics, Cambridge (MA), 3/25-26/2005.

- Time Series Conference of NBER/NSF at SMU, Dallas, 9/17-18/2004.
- Panel conference of NSF-NBER-UCLA at UCLA, Los Angeles, 4/1-2/2004.
- North American Meeting of the Econometric Society, San Diego, 1/3-5/2004.

- European Meeting of the Econometric Society, Stockholm, 8/20-24/2003.
- “Weak and/or Many Instruments”, an NSF/NBER Conference at MIT, Boston, 6/2- 3/2003.

- Inter-University Graduate Student Conference at Princeton, 10/18/2002.

- Invited junior scholar at the NSF Symposium on “Identification and Inference for Econometric Models”, U.C. Berkeley, 8/2-7/2001.
- Invited junior scholar at the workshop “New Directions in Time Series Analysis”, CIRM Luminy, France, 4/23-27/2001.

- Cowles Conference “New Developments in Time Series Econometrics”, Yale, 10/23-24/1999.