RICHARD A. DAVIS: CURRICULUM VITAE

March 20, 2021

Address

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Research Interests

Extreme value theory, time series, applied probability, and stochastic processes.

Education

1979	Ph.D.	Mathematics	University of California, San Diego
1974	B.A.	Mathematics	University of California, San Diego

Academic and Professional Positions

2007–present	Howard Levene Professor of Statistics, Columbia University Chair of Statistics (March 2013 –June 2019)
2019	Jubilee Professor, Department of Mathematical Sciences, Chalmers University of Technology, Göteborg, Sweden.
2011–2013	Villum Kan Rasmussen Visiting Professor, University of Copenhagen
2009–2012	Hans Fischer Senior Fellow, Institute for Advanced Study, Technical University of Munich
2006–2008	Professor Laureate, College of Natural Sciences, Colorado State University
2003–2005	Velux Visiting Professor, University of Copenhagen, supported by Villum Kann Rasmussen Foundation
1990–2008	Professor of Statistics, Colorado State University
2003–2008	Co-director of PRogram for Interdisciplinary Mathematics, Ecology and Statistics (PRIMES), an NSF IGERT funded project.
1997–2005	Chair of Statistics, Colorado State University
Apr–May 1995	Visiting Professor, Department of Statistics Royal Melbourne Institute of Technology, Melbourne, Australia
Feb–Apr 1995	Visiting Professor, Department of Statistics University of New South Wales, Sydney, Australia
May 1989	Visiting Research Scholar, Department of Statistics University of Melbourne, Australia

1987–1988	Visiting Associate Professor (on sabbatical from CSU) Department of Mathematics, University of California, San Diego
1984–1989	Associate Professor of Statistics, Colorado State University
1984 (Spring)	Visiting Research Assistant Professor, Center for Stochastic Processes University of North Carolina at Chapel Hill
1981–1984	Assistant Professor of Statistics, Colorado State University
1979–1981	Applied Mathematics Instructor, Massachusetts Institute of Technology
1979 (Summer)	Postgraduate Research Mathematician, University of California, San Diego
1978–1979	Research Assistant, Mathematics Department, University of California, San Diego

Honors

Alumni Faculty of the Year, 1986, College of Natural Sciences, Colorado State University
Elected Ordinary Member of International Statistics Institute, 1992
Koopmans Econometric Theory Prize for the period 1994–1996, inclusive
Fellow of Institute of Mathematical Statistics, 1995
Fellow of American Statistical Association, 2002
IBM Faculty Award, 2003
Professor Laureate, College of Natural Sciences, Colorado State University, 2006–2008
Hotelling Lectures, University of North Carolina, 2014.
Technical University of Munich Ambassador, 2014
President, Institute of Mathematical Statistics, (elect, president, past president) 2015-2017.
Elected Fellow of International Engineering and Technology Institute, 2018.

Professional Society Memberships

American Statistical Association
Bernoulli Society
Institute of Mathematical Statistics
International Statistics Institute
International Chinese Statistics Association (lifetime member)

Editorial Work/Board Membership

Editor-in-Chief, *Bernoulli* (Jan `10– Dec `12)
Advisory Editor, *Journal of Time Series Analysis.* (Jan ’13–present)
Associate Editor, *Journal of Business and Economic Statistics.* (Jan ’13–present)
Associate Editor, *Communications for Statistical Applications and Methods.* (Jan `13-present)
Associate Editor, *Annals of Applied Probability.* (Jan ’94–Jan ’00)
Associate Editor, *J. Statistical Planning and Inference.* (Jan ’95–Jan ’01)
Associate Editor, *Proceedings of the American Mathematics Society.* (Feb ’00– Dec `05)
EURANDOM Steering Committee for Financial Stochastics (Sept ’02–Dec `04)
Associate Editor, *Extremes* (Jan ’07 – present)
Associate Editor, *Bernoulli* (Jan ’07 – Dec `10)
Editor, *Statistical Science* (Jan **’**08 **–** Dec `10)
Associate Editor, *Stochastic Processes and Their Applications.* (Jan ’93-Jan ’96, Mar `08– Jan `10)

Business and Economics Statistics Section, Chair-elect (2009), Chair (2010)
IMS Council Member (elected), 2013-2016, 2020-presenttehran
Joint IMS/Bernoulli Society Publications Management Committee (Jan `14-present)

External Advisory Board Statistics and Operational Research Centre for Doctoral Training in Partnership with Industry (STOR-i), Lancaster University, 2015—present.

Advisory Board for StatScale, EPSRC-funded programme grant (StatScale Statistical Scalability for Streaming Data), University of Lancaster and Cambridge University. June `17-present.

IMS Carver Award Committee: Aug `17-present.
IMS Memorials Committee: Aug `17-present

Foundation Committee (IMS representative) for “The Prize in Statistics” (Jan `18-present)

Other Professional Service

(i) Refereeing

Advances in Applied Probability, Annals of Applied Probability, Annals of Probability, Annals of Statistics, Biometrika, Canadian Journal of Statistics, Communications in Statistics, Ecological Applications, Econometric Theory, Extremes, IEEE Transactions of Speech and Signal Processing, International Journal of Forecasting, Journal of Applied Probability, Journal of Econometrics, Journal of Multivariate Analysis, Journal of the American Statistical Association, Journal of Risk and Insurance, Journal of Statistical Computation and Simulation, Journal of Statistical Planning and Inference, Journal of Time Series Analysis, Revstat, Statistica Sinica, Statistics and Probability Letters, Stochastic Models, Stochastic Processes and Their Applications, The American Mathematical Monthly, The American Statistician, The Arabian Journal of Science and Engineering, Zeitschrift fur Wahrscheinlichkeitstheorie

(ii) Peer Review Panels & Site Visits

National Science Foundation: Statistics and Probability Screening Panel, December, 1999 & 2000.

National Science Foundation: VIGRE site team reviewing statistics departments at North. Carolina State University and U. of California, Berkeley (2001).

London School of Economics, Department of Statistics (2016).

University of North Carolina, Department of Statistics and Operations Research (2017).

University of Toronto, Department of Statistics (2017).

Oxford University, Department of Statistics (2019).

University of Toronto at Scarborough, Department of Computer and Mathematical Sciences (2020).

(iii) Grant Reviews

Reviewer of National Science Foundation proposals in the probability and statistics section.

Reviewer of National Science Foundation proposals for International Programs and Joint Summer Research Conferences in the Mathematical Sciences.

Reviewer of proposals for the mathematics sections of the Air Force Office of Scientific Research, the Office of Naval Research, and the National Security Agency.

Reviewer for the Natural Sciences and Engineering Research Council (NSERC) of Canada.

Reviewer for the Swedish Research Council (Engineering Section).

Reviewer for the Australian Research Council (ARC).

Reviewer for National Security Agency proposals administered through, the American Mathematical Society.

(iv) Workshops/Short Courses (more listed below under Lectures and Short Courses)

Time Series Workshop, Washington Statistical Society, Oct 30–31, 1995, (10 hours of lectures).

Time Series and Forecasting, sponsored by Division of Educational Outreach and The Department of Statistics, Colorado State University. July 22–23, 1999, (16 hours of lectures).

Time Series and Forecasting, sponsored by Division of Educational Outreach and The Department of Statistics, Colorado State University. March 1–2, 2001, (16 hours of lectures).

PRIMES Workshop on Data Model Fusion, Colorado State University. June 9–11, 2003 (organizer and presenter, 3.5 hours of lectures.)

Alaska Chapter of ASA sponsored course, Kodiak, Alaska: *Short Course on Times Series*. Oct 20–21, 2010. (14 hours of lectures).

(v) Conference Organization/Panel Discussion

Program Chair: IMS Regional Meeting at Davis, CA, June 25–28, 1989.

Session Organizer: Topics in Time Series, IMS Regional Meeting, Baltimore MD, April 1990.

Session Organizer: Topics in Time Series, 3rd World Congress of The Bernoulli Society for Mathematical Statistics and Probability, Chapel Hill, NC. June 1994.

Conference Organizer and Host: 1994 NBER/NSF Workshop on Time Series Analysis, Ft. Collins, CO, Sept 30–Oct 1, 1994

Session Organizer: Modeling Time Series of Counts, Interface Meeting Minneapolis, May 14–16, 1998.

Session Organizer: Spatial Statistics, Interface Meeting Chicago, June 9–12, 1999.

Conference Organizer and Host: 2000 NBER/NSF Workshop on Time Series Analysis, Ft. Collins, CO, Sept 22–Sept 23, 2000

Senior Investigator, U.S.-Japan Joint Seminar: Statistical Time Series Analysis sponsored by NSF, Kyoto, Japan, June 18–22, 2001.

Program Committee for IMS Annual Meeting, Atlanta, August 5–9, 2001.

Co-organizer (with James Stock and Ruey Tsay) NBER/NSF Workshops in Time Series, 2001–present.

Co-organizer (with Claudia Klüppelberg) "Statistics in Finance," Oberwolfach, Germany, Jan 12–16, 2004.

Scientific Committee, International Workshop on Applied Probability 2004, University of Piraeus, Greece, March 22-25, 2004.

Scientific Program Committee, Sixth Bernoulli World Congress, Barcelona, Spain, July 26-31, 2004.

Scientific Organizing Committee, Extreme Value Analysis, Gothenburg, Sweden, August 15–19, 2005.

Scientific Program Committee, International Workshop on Applied Probability 2006, University of Connecticut, Storrs, CN, May 16–18, 2006.

Program Committee, Graybill VI Conference, "Symposium on Applied Probability and Time Series: a Conference in Honour of Peter Brockwell" and "Workshop in Bioinformatics," Fort Collins, CO, June 13–15, 2007.

Scientific Organizing Committee, Extreme Value Analysis, Bern, Switzerland, July 23–27, 2007.

Co-organizer (with Jurgen Franke), Miniworkshop "Time Series with Sudden Structural Breaks," Oberwolfach, Germany, Feb 25–29, 2008.

Co-organizer (with Thomas Mikosch and Paul Embrechts) "The Mathematics and Statistics of Quantitative Risk Management," Oberwolfach, Germany, Mar 17–21, 2008.

Co-Organizer of Graybill VIII Conference, "6th International Conference on Extreme Value Analysis," Fort Collins, CO, June 22–26, 2009.

Scientific Organizing Committee, Extreme Value Analysis, Lyon, France, June 27–July 1, 2011.

Co-organizer (with Thomas Mikosch and Paul Embrechts) "The Mathematics and Statistics of Quantitative Risk Management," Oberwolfach, Germany, Jan 30– Feb 3, 2012.

Program Committee for the Fifth Annual Conference of the Society for Financial Econometrics (SoFiE), Oxford-Man Institute, University of Oxford on June 20-22, 2012.

Scientific Committee for Conference on long-range dependence, self-similarity and heavy tails in honor of Murad Taqqu's 70th birthday April 19-21, 2012.

Pre-World Congress Meeting for Young Researchers in Probability and Statistics, Istanbul: *What, Where, and How to Publish: Advice from the Experts.* July 8, 2012.

Co-organizer and featured speaker for: "PhD Course and Workshop on Extremes in Space and Time", University of Copenhagen, May 27, 2013 - Thursday, May 30, 2013.

Organizer of Conference "Measures of Extremal Dependence" sponsored by Columbia University. May 3, 2013.

Program Committee for the Fifth Annual Conference of the Society for Financial Econometrics (SoFiE), Singapore on June 12-14, 2013.

Co-organizer: "PhD Course and Workshop on Extremes in Space and Time," University of Copenhagen, May 27-30, 2013.

Organizer of Session "Financial Time Series" for 29th European Meeting of Statisticians, Budapest. July 20-25, 2013.

Scientific Organizing Committee: "International Conference Ars Conjectandi 1713-2013 Conference" in celebration of the 300th anniversary of the publication of Jacob Bernoulli's "Ars conjectandi", Basel, Switzerland. October 16-18, 2013.

Scientific Advisory Committee: "Inference for Change-Point and Related Processes," Isaac Newton Institute for Mathematical Sciences, Cambridge, UK. Jan 13-Feb 7 2014.

Scientific Organizing Committee, Extreme Value Analysis, Ann Arbor, MI, June 27–July 1, 2015.

Organizer of Invited Session for EVA Meeting, Ann Arbor, MI, June 27–July 1, 2015.

Organizer of Invited IMS Session for JSM, Seattle, WA. Aug 8–13, 2015.

Co-organizer (with Thomas Mikosch, Paul Embrechts, and Andrew Patton) "The Mathematics and Statistics of Quantitative Risk Management," Oberwolfach, Germany, Sept 20–25, 2015.

Organizing Committee "Indo-US Workshop on Time Series Analysis", sponsored by SAMSI and Indian Institute of Science Education and Research, IISER, Pune, India, May 25-30, 2015.

International Advisory Committee "Celebrating Statistical Innovationa and Impact in a World of Big and Small Data." Sponsored by IISA and the University of Pune, Dec 20-24, 2015.

Scientific Committee "Second International Congress in Actuarial Science and Quantitative Finance", Cartagena, Colombia, June 15-18, 2016

Session organizer (with Arup Bose), "Random Matrices" for the Symposium on Probability and Theory and Stochastic Processes, sponsored by the Indian Mathematics Consortium in co-operation with the American Mathematics Society. Banaras Hindu University, Varanasi, India. Dec 14-17, 2016.

Conference Organizer and Host (with Serena Ng): 2016 NBER/NSF Workshop on Time Series Analysis, Columbia University, Sept 16–Sept 17, 2016.

Session organizer (with Phyllis Wan), "Extreme Value Analysis" for New England Statistics Symposium, Storrs, April 22, 2017.

Co-organizer (with John Aston and Axel Munk) of Second workshop in the Programme "Statistical Scalability" (Issac Newton Institute Workshop), "Statistics of geometric features and new data types", Cambridge University, March 19-23, 2018.

Scientific Committee "Third International Congress in Actuarial Science and QuantitativeFinance", Manizales, Colombia, June 19-22, 2019

Scientific Committee for the Extreme Value Analysis 2019 Meeting, Zagreb, July 1-5, 2019.

Organizing Committee for the Symposium in Honor of Mark Brown, Columbia University. March 1, 2019.

Organizing Committee for Workshop on Risk: Modeling and Analysis, Southwest University of Congqing, School of Economics and Management, Chongqing, June 22-26, 2020.

(vi) Other Reviews

External reviewer for numerous promotions to full professor and to tenure and associate professor.

Opponent for Nader Tajvidi's PhD thesis defense, Dec. 6, 1996; Department of Mathematics, U. of Gothenburg.

External PhD examiner for Bojan Basrak PhD defense, June 16, 2000; Department of Mathematics, U. of Groningen.

University Service (CSU)

Chair, Reappointment Committee for Chair of Computer Science, 2000.
Chair, Search Committee for Chair of Computer Science, 2001–02.

Member, Search Committee for Dean of the College of Natural Sciences, 2001–02.
Chair, Search Committee for Chair of Mathematics, 2002.
Member, Program Review Committee for Electrical and Computer Engineering, 2002.
Member, Executive Committee for Academic Enrichment Program for Bioinformatics, 2005–2007.

Completed Masters Students

Rocco Ballerina ’83 (co-advisor with P.J. Brockwell)
Keizo Kinoshita ‘84
Sally Wampler ‘88 (co-advisor with P.J. Brockwell)
Karen Garrett ‘92 (co-advisor with P.J. Brockwell)
Veng Va Lam ‘92 (co-advisor with P.J. Brockwell)
Andy Sleeper ‘94
Ying Wang ‘95
Karin Chu ‘96 (co-advisor with Robert Lund)
Laurie Porth ‘97 (co-advisor with Duane Boes)
Francis Parisis ‘98 (co-advisor with Robert Lund)
Silvina Diaz ‘01
Jeremy Wilhelm `02 (co-advisor with Jan Hannig)
Melissa Kerchner `05 (co-advisor with Brad Biggerstaff)
Wing Chan `07

Completed PhD Students

Ed Mulrow ‘86 (co-advisor with S.I. Resnick), *“The Convex Hull Of a Random Sample in R^2.”*

James Marengo ’86, *“Limit Theory For a Class Of Multivariate Moving Averages and Related Topics.”*

S.N. Gupta ‘86 (co-advisor with D.C. Boes) *“Parameter Estimation in Fractionally Differenced ARMA Processes.”*

Jian Liu ‘87 (co-advisor with P.J. Brockwell), *“Regression, ARMA Processes, and Bilinear Time Series With Finite and Infinite Variance.”*

F. Jay Breidt ‘91, *“On the Structure Of Innovations For Non-Gaussian Linear Processes.”*

Changhua Chen ‘91 (co-advisor with P.J. Brockwell), *“Model Selection and Missing Value Estimation in Time Series.”*

Jerry Johnson ‘92 (co-advisor with P.J. Brockwell), *“Exact Gaussian Likelihood for Irregularly Observed Non-Stationary Processes.”*

Rafe Donahue ’92 (co-advisor with P.J. Brockwell), *“Estimation For Nearest 1-Neighbor Moving Average Processes.”*

Meijing Chen ‘96, *“Estimation and Inference for Non-invertible and Nearly Non-Invertible Moving Average Models.”*

Philippe Naveau ‘98 (co-advisor with R.L. Tweedie,) *“Almost Sure Convergence of the Maximum of a Stationary Sequence and Asymptotic Properties of Probability Weighted Moments.”*

Matthew Calder ‘98, *“Estimation of the Parameters of Non-causal Autoregressive Processes With Heavy Tails.”*

Alex Trindade ‘00 (co-advisor with P.J. Brockwell), *“Modified Burg Algorithms For Multivariate Subset Autoregression.”*

Sarah Streett ‘00, *“Some Observation Driven Models for Time Series.”*

Sandy Thompson ‘00 (co-advisor with J. Hoeting), *“Bayesian Model Averaging and Spatial Prediction.”*

Ying Wang ‘02, *“Modeling Time Series of Counts.”*

Beth Andrews ‘03, *“Parameter Estimation for All-Pass Time Series Models.”*

Gabriel Rodriguez-Yam ‘03, *“Estimation for State-Space Models and Bayesian Regression Analysis with Parameter Constraints.”*

Andrew Merton ‘06 (co-advisor with J. Hoeting), *“Geostatistical Models: Model Selection and Parameter Estimation Under Infill and Expanding Domain Asymptotics”*

Rongning Wu ‘07, *“Estimation for Some Linear and Nonlinear Time Series Models”*

Yu Yang ‘07 (co-advisor with P.J. Brockwell), *“Estimation for Lévy-driven CARMA Processes”*

Ke Wang ‘08 (co-advisor with F. Jay Breidt), *“Spatial Models with Applications in Computer Experiment”*

Wenying Huang ‘08 (co-advisor with F. Jay Breidt) *“Spatial Processes with Stochastic Heteroscadesticity”*

Stacey Hancock `08 (PhD, co-advisor with Hari Iyer) *“Estimation of Structural Breaks in Nonstationary Time Series”*

Josh French `09, “*Confidence Regions for Level Curves and a Limit Theorem for the maxima of Gaussian Random Fields*”

Columbia Students:

Li Song `10, “*Inference for Nonstandard MA and Noncausal VAR Models*”

Chun Yip Yau `10, “*A Change-Point Problem and Composite Likelihood Inference in Time Series Models*”

Pengfei Zang `12 (co-advisor with Tian Zheng), “*Modeling Strategies for Large Dimensional Vector Autoregressions*”

Heng Liu `12, “*Some Models for Time Series of Counts*”

Xuan Yang `14 (co-advisor with Jingchen Liu), *“Limit Theory for Spatial Processes, Bootstrap Quantile Variance Estimators, and Efficiency Measures for Markov Chain Monte Carlo”*

Yong Bum Cho `16, *“Measuring Spatial Extremal Dependence”*

Jing Zhang `17, *"Time Series Modeling With Shape Constraints"*

Phyllis Wan `18: "*Application of Distance Covariance to Extremes and Time Series and Inference for Linear Preferential Attachment Networks*"

Technical University of Munich

Oliver Pfaffel `12 (co-advisor with Robert Stelzer), "*Eigenvalues of Large Random Matrices with Dependent Entries and Strong Solutions of SDEs*"

Christina Steinkohl `13 (co-advisor with Claudia Klüppelberg), "*Statistical Modelling of Extremes in Space and Time using Max-Stable Processes*"

Current Graduate Students

Visiting Research Students

Anders Hedegaard Jessen, Copenhagen (9/08 – 12/08)
Órlaith Burke, Dublin (9/09-12/09)
Sebastian Breiling, Kaiserslautern (9/10 – 11/10)
Oliver Pffafel, Munich (1/11-5/11)
Christina Steinkohl, Munich (9/11-12/11)
Vincenzo Ferrazzano, Munich (1/12-3/12)
Camilla Mondrup Andreassen, Aarhus (9/12-12/12)
Adrien Hitz, Lausanne (1/13-4/13, 9/15-12/15)
Yuwei Zhao, Copenhagen (2/13-5/13)
Jean-Luc Lallement (10/13-12/13)
Michal Warchol, Leuvans (1/15-6/15)
Junichi Hirukawa, Tokyo (3-16)
Adam Lund, Copenhagen (9/15-11/15)
Johannes Heiny, Copenhagen (1/16-6/16)
Mikkel Slot Nielsen, Aarhaus (9/17-12/17)
Thiago do Rego Sousa, Munich (1/18 – 5/18)

Postdoctoral Fellows

Gabriel Rodriguez-Yam (11/03 – 6/05)
Daniel Cooley (11/05 – 7/07)
Pawel Polak (1/14 – 6/15)
Jingjing Zou (1/15 – 8/17)
Stefan Wager (9/16 – 6/17)
Thibault Vatter (3/17 – 8/18)
Mikkel Slot Nielsen (1/20-3/21)

Invited Lectures and Short Courses (since 1992)

Feb 2-4, 2021. The 22th Applied Stochastic Processes Workshop (Plenary Talk), Tehran. Title: *Modeling of Time Series Using Random Forests: Theoretical Developments.*

Dec 9, 2020. An Interview with Professor Richard Davis - Moderated by Sneha Swati and Levi Lee, Columbia University

Oct 16, 2020. Columbia Student Seminar. Title: *Applications of Distance Correlation to Time Series*

Sep 11-16, 2020. CIRM Workshop: "New Results on Time Series and their Statistical Applications", Luminy. Title: *Modeling of Time Series Using Random Forests: Theoretical Developments.*

Apr 21, 2020. Facutly Highlight Series, MA program at Columbia: *Benefits of Broadening your Statistics Education*

Jan 9-10, 2020. STOR-I Annual Conference, Lancaster. Title: *Semiparametric Estimation for Max-Stable Processes with Applications to Environmental Data.*

Dec 19–21, 2019. Statistical Methods in Finance. Chennai Mathematics Institute and ISI. Plenary Talk: *Inference on the Tail Process with Application to Financial Time Series Modelling.*

Nov 15, 2019. Chalmers Lunch Talks at Ericsson. Title: *Structural Breaks and Outlier Detection in Time Series.*

Nov 4, 2019. Xi'an Jiaotong-Liverpool University, Suzhou. Title: *Semiparametric Estimation for Max-Stable Processes with Applications to Environmental Data.*

Oct 31-Nov 1, 2019. Shanghai Center for Mathematical Sciences. Short Course: *Time Series of Counts.*

Oct 17, 2019. Chalmers University of Technology, Statistics and Biomathematics Seminar. Title: *Extreme Value Analysis Without the Largest Observations: What Can be Done?*

Oct 14, 2019. Brummer & Partners MathDataLab Seminar, KTH, Stockholm. Title: *The Use of Shape Constraints for Modeling Time Series of Counts.*

Aug 26—27, 2019.International Conference on Environmental Statistics. Kunming, China. Keynote talk. *Semiparametric Estimation for Max-Stable Processes with Applications to Environmental Data.*

Aug 18—23, 2019. ISI 2019, Kuala Lumpur. Invited paper session "New develpoments in time series analysis for complex data": Title: *The Use of Shape Constraints for Modeling Time Series of Counts.*

July 22—26, 2019. European Meeting of Statisticians, Palermo, Italy. Invited session "Time series analysis for complex data": Title: *Noncausal Vector AR Processes with Application to Economic Time Series.*

July 15—19, 2019. International Statistics Symposium, Barranquilla, Colombia: Special Invited Talk. Title: *Extreme Value Analysis Without the Largest Observations: What Can be Done?*

July 15—19, 2019. International Statistics Symposium, Barranquilla, Colombia: Short course on "Time Series of Counts" (4.5 hours of lectures).

June 6, 2019. Time Series: A Conference Honouring Professor William Dunsmuir, Sydney, Australia: Title: *William and Me: a 40 year retrospective.*

May 2—3, 2019. 2019 Rutgers Statistics Symposium: Tomorrow's Statistics for Today's Data: Title: *The Use of Shape Constraints for Modeling Time Series of Counts.*

Apr 8, 2019. Statistics Colloquium, Rice University: Title: *The Use of Shape Constraints for Modeling Time Series of Counts.*

Apr 1, 2019. Statistics Colloquium, University of Missouri: Title: *Noncausal Vector AR Processes with Application to Economic Time Series.*

Mar 27–29, 2019. Workshop on Score-driven Time Series Models, Cambridge, UK: Title: *The Use of Shape Constraints for Modeling Time Series of Counts.*

Sept 20–21, 2018. New Developments in Econometrics and Time Series, Copenhagen. Title: *Inference on the Tail Process with Application to Financial Time Series Modelling.*

Sept 14—16, 2018. Plenary Talk at Michigan State Symposium on Mathematical Statistics and Applications, In Honor of Hira L. Kouls Scientific Legacy. Michigan State. Title: *Extreme Value Analysis Without the Largest Observations: What Can be Done?*

Aug 24–25, 2018. Plenary Lecture. JAFEE International Conference on Financial Engineering, 12th JAFEE-Columbia Conference. Tokyo. Title: *Inference on the Tail Process with Application to Financial Time Series Modelling.*

June 13–14, 2018. International Symposium on Financial Engineering and Risk Management (FERM 2018), Fudan University: *Inference on the Tail Process with Application to Financial Time Series Modelling.*

May 28–30, 2018. Keynote talk. Time Series Analysis of Higher Moments and Distributions of Financial Data, IAS, Hong Kong UST: *Inference on the Tail Process with Application to Financial Time Series Modelling.*

May 4–5, 2018. Financial Econometrics Conference, Toulouse School of Economics: *Inference on the Tail Process with Application to Financial Time Series Modelling.*

Feb 21–23, 2018. Frontiers in Forecasting, Institute for Mathematics and its Applications., Minneapolis: *Models for Time Series of Counts with Shape Constraints.*

Jan 8–12, 2018. Complex Time Series Modelling and Forecasting: Dynamic Network, Spatio-temporal Data, and Functional Processes, Tsinghua Sanya International Mathematics Forum (TSIMF), Sanya, Hainan, China.Title: *Models for Time Series of Counts with Shape Constraints.*

Jan 3, 2018. Keynote Talk at Workshop on Time Series and Related Topics, Hong Kong University of Science and Technology Title: *Extreme Value Analysis Without the Largest*

Observations: What Can be Done?

Sept 11–15, 2017. Workshop on Lévy processes and time series: in honour of Peter Brockwell and Ross Maller. Ulm, Germany. Title: *Models for Time Series of Counts with Shape Constraints.*

Sept 8–9, 2017. NSF/NBER Workshop in Time Series, Northwestern. Title: *Models for Time Series of Counts with Shape Constraints.*

Jul 29–Aug 3, 2017. JSM, Session: "Recent Developments in Statistical Inference Using Distance Correlation and Related Dependence Metrics," Baltimore. Title: *Applications of Distance Correlation to Time Series*

Jul 16–21, 2017. 61st World Statistics Conference. Session: "ISI Invited Session with Statitcal Societies Presidents-IBS and IMS", Morocco. Title: *A Brief History of the IMS (Institute of Mathematical Statistics.*

Jul 16–21, 2017. 61st World Statistics Conference. Session: "High-Dimensional Extremes: Models, Inference and Challenges", Morocco. Title: *Extreme Value Analysis Without the Largest Observations: What Can be Done?*

June 28–Jul 1, 2017. IMS-China, Session: "Tail Behavior and Risk Management," Nanning, China: Title: *Extreme Value Analysis Without the Largest Observations: What Can be Done?*

June 20–22, 2017. "Heavy Tails and Long-Range Dependence: A Workshop in Honor of Gennady Samorodnitsky's 60th Birthday", Paris. Title: *Models for Time Series of Counts with Shape Constraints.*

April 28, 2017. Electrical Engineering Seminar: Harvard University, Title: *Applications of Distance Correlation to Time Series*

Mar 21–24, 2017. ISI Regional Statistics Conference Bali, Session: "Time Series - Novel Methods and Applicationss." Bali. Title: *Applications of Distance Correlation to Time Series*

Feb 13, 2017. Workshop on Time Series Analysis, Copenhagen. Title: *Extreme Value Analysis Without the Largest Observations: What Can be Done?*

Jan 11, 2017. University of Lancaster, STOR-i seminar. Title: *Extreme Value Analysis Without the Largest Observations: What Can be Done?*

Nov 8–11, 2016. Graduate course on "Time Series and Extremes" by Thomas Mikosch and Richard Davis, Bogota, Colombia.

Oct 21–23, 2016. Random Processes and Time Series: Theory and Applications. A conference in Honor of Murray Rosenblatt, UCSD. Title: *Noncausal Vector AR Processes with Application to Economic Time Series.*

Oct 12–14, 2016. Conference on Conditional Independence Structures and Extremes. Munich. Title: *Applications of Distance Correlation to Time Series*

Aug 26, 2016. Extremal Dependence Modeling. Universite Catholique de Louvain. Title: *Applications of Distance Correlation to Time Series.*

Aug 18–21, 2016. International Indian Statistical Association Conference. Emanuel Parzen Memorial session. Title: *Applications of Distance Correlation to Time Series*.

Aug 18–21, 2016. International Indian Statistical Association Conference. Panel Discussion: "Statistical Collaborations Across Organizations – A Step in the Right Direction."

Aug 18–21, 2016. International Indian Statistical Association Conference. Short course: "Structural Breaks, Outliers, MDL, Some Theory and Google Trends."

Jul 31–Aug 4, 2016. Joint Statistical Meetings, Chicago. Session: "Recent Advances in Discrete-Valued Time Series" Title: *On Bivariate Time Series of Counts.*

Jul 27–30, 2016. IMS-New Researchers Conference, Madison, WI. Panel Discussions: *Publishing* and *Mentoring.*

Jul 11–15, 2016. IMS President's Address, World Congress of Statistics and Probability, Toronto: *Are We Meeting the Challenge?* Video can be accessed at: http://www.stat.columbia.edu/~rdavis/PresidentAddress2016.ogv

June 27– 30, 2016. The 4th IMS Asia Pacific Rim Meeting. Hong Kong. Session: "Recent Advances and Trends in Time Series Analysis" Title: *On Consistency (or nonconsistency!) of MDL Model Selection for Piecewise Autoregressions.*

May 2– 6, 2016. Workshop on Dependence, Stability and Extremes, The Fields Institute, Toronto. Title: *Applications of Distance Correlation to Time Series*.

Mar 21– 23, 2016. Workshop on Extreme Value Theory and Time Series, Karlsruhe Institute of Technology. Title: *On Consistency (or nonconsistency!) of MDL Model Selection for Piecewise Autoregressions.*

Mar 14–15, 2016. Columbia University-ETH Zurich Workshop, "Extreme Environmental Risks: Statistical Modeling and Insurability," Zurich: Title: *Topics in Spatial Extreme Value Theory.*

Mar 6–8, 2016. Ibusuki International Seminar, Kyushu University. Title: *On Central Limit Theorems For Weakly Dependent Random Fields with Applications.*

Mar 3–5, 2016. High Dimensional Statistical Analysis for Time Spatial Processes and Quantile Analysis for Time Series, Kumamoto University. Title: *Big n, Big p: Eigenvalues for Covariance Matrices of Heavy-Tailed Multivariate Time Series*

Feb 29– Mar 2, 2016. High Dimensional Statistical Analysis for Time Spatial Processes and Quantile Analysis for Time Series, Waseda University. Title: *On Consistency (or nonconsistency!) of MDL Model Selection for Piecewise Autoregressions*

Dec 18–20, 2015. Keynote address International Workshop on Time Series Econometrics, Tsinghua Sanya International Mathematics Forum (TSIMF), Sanya, Hainan, China. Title: *On Consistency (or nonconsistency!) of MDL Model Selection for Piecewise Autoregressions*

Dec 15–16, 2015. Workshop on Financial Time Series and Beyond, Hong Kong University of Science and Technology. Title: *On Central Limit Theorems For Weakly Dependent Random Fields with Applications.*

Dec 5, 2015. Resnick Birthday Conference, Cornell University, New York. Title: *On Consistency (or nonconsistency!) of MDL Model Selection for Piecewise Autoregressions*

Nov 2–3, 2015. Workshop on Applied Probability and Computational Methods in Applied Sciences, Shanghai Mathematics Center at Fudan University. Title: *On Central Limit Theorems For Weakly Dependent Random Fields with Applications.*

Sep 25-16–12, 2015. NSF/NBER Workshop in Time Series, Vienna, Austria: *Big n, Big p: Eigenvalues for Covariance Matrices of Heavy-Tailed Multivariate Time Series*

Sep 11, 2015. Cornell Day of Statistics, Cornell University. Title: *On Central Limit Theorems For Weakly Dependent Random Fields with Applications.*

Aug 27–30, 2015. Workshop: Recent developments in statistics for complex dependent data Braunschweig. Plenary talk: *On Central Limit Theorems For Weakly Dependent Random Fields.*

Aug 8–13, 2015. Joint Statistical Meetings, Seattle. Session: "Statistical Advances of Large Scale Factor Models, VAR Models, and Functional Time Series Models." *Reduced-Rank Covariance Estimation in Vector Autoregressive Modeling.*

Jul 26–31, 2015. 60th World Statistics Congress—ISI 2015, Rio de Janeiro. Session: "Special Topics Session on Extreme Values and Heavy Tailed Phenomena." *Threshold Selection for Multivariate Regularly Varying Data.*

Jul 1–4, 2015. IMS-China International Conference on Statistics and Probability, Kunming, China. Session: "Time series analysis: recent challenges and advances. "*Theory and Inference for a Class of Nonlinear Models with Application to Time Series of Counts."*

Jun 25–27, 2015. 2015 Fifth International IMS-FIPS Workshop, Rutgers. Plenary talk: *Big n, Big p: Eigenvalues for Cov Matrices of Heavy-Tailed Multivariate Time Series.*

Jun 22, 2015. 60th Birthday Symposium for Thomas Mikosch, Copenhagen: *Thomas and Me*

Jun 14–17, 2015. Joint 24th ICSA Applied Statistics Symposium and 13th Graybill Conference, Fort Collins. Plenary talk: *Sparse Vector Autoregressive Modeling.*

Jun 14–17, 2015. Joint 24th ICSA Applied Statistics Symposium and 13th Graybill Conference, Fort Collins. Panel Discussion: *What Are the Expected Professional Behaviors After Statistics Degrees?*

Jun 1–2, 2015. NSF Conference on "Statistics for Complex Systems", Madison, WI: *Theory and Inference for a Class of Nonlinear Models with Application to Time Series of Counts.*

May 25–30, 2015. "Indo-US Workshop on Time Series Analysis", sponsored by SAMSI and Indian Institute of Science Education and Research, IISER, Pune, India: *Computer lab on structural breaks.*

May 25–30, 2015. "Indo-US Workshop on Time Series Analysis", sponsored by SAMSI and Indian Institute of Science Education and Research, IISER, Pune, India: *Structural Breaks, Outliers, MDL, Some Theory and Google Trends.*

Dec 6 –8, 2014. Special Invited Session on Statistics of Extremes, and Applications, 7th International Conference of ECRIM on Computational and Methodological Statistics, Pisa: *The extremogram: a measure of extremal dependence for univariate and multivariate time series.*

Nov 13, 2014. Wharton Statistics Colloquium: *Big n, Big p: Eigenvalues for Cov Matrices of Heavy-Tailed Multivariate Time Series.*

Nov 6, 2014. Statistics Seminar, Department of Decision Sciences, Bocconi University, Milan: *Theory and Inference for a Class of Nonlinear Models with Application to Time Series of Counts.*

Oct 20 –24, 2014. Conference on Applied Statistics in Defense, Bureau of Labor Statistics, Washington DC: *Applications of the Extremogram to Time Series and Spatial Processes*

Oct 17, 2014. Fourth Princeton Day of Statistics: *Big n, Big p: Eigenvalues for Cov Matrices of Heavy-Tailed Multivariate Time Series.*

Jul 20-25, 2014. Keynote address, XXI SINAPE - National Symposium of Probability and Statistics, Natal, Brazil: *Sparse vector autoregressive modeling.*

Jun 29– Jul 3, 2014. Third IMS Asia Pacific Rim Meeting, Taipei: *Asymptotic Theory for the Sample Covariance Matrix of a Heavy-Tailed Multivariate Time Series.*

June 27–28, 2014. International Symposium on Financial Engineering and Risk Management FIRM2014, Beijing: *Noncausal Vector AR Processes with Application to Economic Time Series.*

June 15–20, 2014. First International Congress on Actuarial Science and Quantitative Finance, Bogota, Universidad Nactional de Colombia: *Noncausal Vector AR Processes with Application to Economic Time Series.*

June 15–20, 2014 Short Course (6 hours of lectures), "*Heavy-tailed Time Series: Theory and Applications*", First International Congress on Actuarial Science and Quantitative Finance, Bogota, Universidad Nactional de Colombia.

June 6, 2014. Workshop on Quantitative Methods in Finance and Insurance, University of Zagreb, Croatia: *Big n, Big p: Eigenvalues for Cov Matrices of Heavy-Tailed Multivariate Time Series.*

June 5, 2014. Crash Course On Risk Modelling Methods for Heavy Tailed Data (2 lectures), University of Zagreb, Croatia: *Asymptotics for the Spatial Extremogram.*

May 19-23, 2014. Self-normalized Asymptotic Theory in Probability, Statistics and Econometrics, National University of Singapore, Institute of Mathematical Statistics: *Big n, Big p: Eigenvalues for Cov Matrices of Heavy-Tailed Multivariate Time Series*

May 5, 2014. University of Washington, Statistics Seminar: *Big n, Big p: Eigenvalues for Cov Matrices of Heavy-Tailed Multivariate Time Series.*

Apr 17, 2014. Applied Probability and Risk Seminar, Columbia University: *Big n, Big p: Eigenvalues for Cov Matrices of Heavy-Tailed Multivariate Time Series*

Apr 4, 2014. Statistics Seminar, University of New South Wales: *Big n, Big p: Eigenvalues for Cov Matrices of Heavy-Tailed Multivariate Time Series.*

Mar 24 & 26, 2014. Hotelling Lectures, University of North Carolina
Talk 1: *Structural Breaks, Outliers, MDL, Some Theory and Google Trends*
Talk 2: *Big n, Big p: Eigenvalues for Cov Matrices of Heavy-Tailed Multivariate Time Series*

Mar 6–8, 2014. Nishi-Izu Seminar, Toi Nishi-Izu: *Asymptotics for the Spatial Extremogram.*

Mar 3–5, 2014. Waseda International Symposium, "Stable Process, Semimartingale, Finance and Pension Mathematics," Waseda University: *Largest eigenvalues of the sample covariance matrix for p-variate time series with heavy-tails.*

Jan 31, 2014. Van Dantzig Seminar, University of Delft: *Largest eigenvalues of the sample covariance matrix for p-variate time series with heavy-tails.*

Jan 30, 2014. "Inference for Change-Point and Related Processes," Isaac Newton Institute for Mathematical Sciences, Cambridge, UK. *Theory and Inference for a Class of Nonlinear Models with Application to Time Series of Counts.*

Nov 8, 2013. Statistics Seminar, University of New South Wales: *Theory and Inference for a Class of Nonlinear Models with Application to Time Series of Counts.*

Sep 23–27, 2013. Oberwolfach Conference on "Statistical Inference for Complex Time Series Data," Oberwolfach, Germany: *Largest eigenvalues of the sample covariance matrix for p-variate time series with heavy-tails.*

Sep 8–11, 2013. EVT2013 – Extremes in Vimeiro Today, Vimeiro, Portugal: Invited Speaker: *Largest eigenvalues of the sample covariance matrix for p-variate time series with heavy-tails.*

Aug 29, 2013. Workshop in Recent Advances in Asymptotic Statistics, Chinese University of Hong Kong: *Largest eigenvalues of the sample covariance matrix for p-variate time series with heavy-tails.*

Aug 25-30, 2013. 59th ISI World Statistics Congress, Hong Kong. Session: "Statistical methods for analyzing financial data." *Sparse vector autoregressive modeling.*

Aug 13–16, 2013. Building Bridges: Probability, Statistics and Applications: special session in honor of Claudia Klüppelberg's 60th birthday, Braunschweig: *Largest eigenvalues of the sample covariance matrix for p-variate time series of length n with heavy-tails.*

July 8-12, 2013. Extreme Value Analysis Conference 2013, Shanghai, China. Session: "Multivariate Extremes and Modeling." *Statistical Inference for Max-Stable Processes in Space and Time.*

May 27–30, 2013 "PhD Course and Workshop on Extremes in Space and Time", University of Copenhagen. Topics:

- *The extremogram for time series: theory and examples*

- *The space-time extremogram*
- *Spatial modeling*

April 25, 2013. University of Chicago Seminar in Financial Mathematics. *Noncausal Vector AR Processes with Application to Economic Time Series.*

Mar 18–19, 2013. The 10th JAFEE-Columbia Conference on Mathematics of Finance, Institute of Statistical Mathematics, Tokyo, Japan. *Noncausal Vector AR Processes with Application to Economic Time Series.*

Feb 21, 2013. Department of Mathematics Colloquium, Tulane University, New Orleans, *Functional Convergence of Stochastic Integrals with Application to Inference in Time Series Models.*

Feb 13, 2013. Econometrics Colloquium, Columbia University: *Theory and Inference for a Class of Nonlinear Models with Application to Time Series of Counts.*

Jan 21–24, 2013. 2nd Congreso de Actuarios de la UNAM, Facultad de Ciencias, Year of Statistics 2013, Mexico City. *Noncausal Vector AR Processes with Application to Economic Time Series.*

Jan 14–17, 2013. Heavy tails, extremes and long range dependence workshop, Indian Statistical Institute, Kolkata: *Limit Theory for the Largest Eigenvalues of a Sample Covariance Matrix from High-Dimensional Observations with Heavy Tails.*

Dec 3–4, 2012. MURI Kickoff Meeting, Natick, MA: *Structural Break Detection in the Presence of Outliers*

Oct 19, 2012. Department of Statistics, George Mason University. *Detection of Structural Breaks and Outliers in Time Series.*

Oct 15, 2012. U Penn Econometrics Workshop. *Noncausal Vector AR Processes with Application to Economic Time Series.*

Oct 5–7, 2012. International Conference on Advances in Interdisciplinary Statistics and Combinatorics, Greensboro, NC. Plenary talk: *Sparse Vector Autoregressive Modeling*

Sep 3–14, 2012. ECOLE de recherche CIMPA (UNESCO sponsored): Statistique, Environment et Changement Climatique: Cotonou, Benin: *4 lectures (2 hours each) on time series modeling, multivariate time series modeling, structural break estimation.*

July 9–14, 2012. 8th World Congress in Probability and Statistics, Istanbul: *Limit Theory for the Largest Eigenvalues of a Sample Covariance Matrix from High-Dimensional Observations with Heavy Tails.*

July 6–8, 2012. Pre-World Congress Meeting for Young Researchers in Probability and Statistics, Istanbul: *Identifying Structural Breaks and Outliers in Time Series.*

June 19–22, 2012. Financial time series analysis: high dimensionality, non-stationarity and the financial crisis, Singapore National University, Institute of Mathematical Statistics: *Sparse Vector Autoregressive Modeling*

June 9–12, 2012. Keynote talk II: Recent Advances in Time Series Analysis, Protaras, Cyprus: *Theory and Inference for a Class of Nonlinear Models with Application to Time Series of Counts*

June 9–12, 2012. Keynote talk I: Recent Advances in Time Series Analysis, Protaras, Cyprus: *Noncausal Vector AR Processes with Application to Financial Time Series.*

May 23–25, 2012. Statistical Models for Financial Data III, Graz, Austria: *Limit Theory for the Largest Eigenvalues of a Sample Covariance Matrix from High-Dimensional Observations with Heavy Tails.*

Apr 19–21, 2012. Conference on Long-Range Dependence, Self-Similarity and Heavy Tails in Honor of Murad Taqqu's 70th Birthday, Chapel Hill, NC. *Limit Theory for the Largest Eigenvalues of a Sample Covariance Matrix from High-Dimensional Observations with Heavy Tails.*

Apr 9, 2012. Info-Metrics Institute and Department of Economics, American University *Detection of Structural Breaks and Outliers in Time Series.*

Mar 29, 2012. Department of Statistics, University of Lancaster, UK. *Sparse Vector Autoregressive Modeling.*

Mar 26–28, 2012. Recent Advances in Change-Point Analysis, CRiSM, University of Warwick, UK. *Detection of Structural Breaks and Outliers in Time Series.*

Feb 24, 2012. Tinbergen Seminar, Amsterdam, The Netherlands: *Estimating Extremal Dependence in Time Series via the Extremogram*.

Feb 22, 2012. Econometrics and Statistics Seminar, Tilburg School of Economics and Management: *Detection of Structural Breaks and Outliers in Time Series*.

Feb 5–8, 2012. Winter Statistics School, Les Diablerets, Switzerland (3 lectures, 1.5 hours each). Topics:

- *Detection of Structural Breaks and Outliers in Time Series*
- *Estimating Extremal Dependence in Time Series via the Extremogram*

Oct 14, 2011. CRM-ISM-GERAD Colloque de Statistique, Montreal: *Estimating Extremal Dependence in Time Series via the Extremogram*

Sep 12-13, 2011. "New Developments in Econometrics and Time Series", Brussels: *Noncausal Vector AR Processes with Application to Financial Time Series*

Sep 7-9, 2011. "Instantaneous Frequencies and Trends for Nonstationary Nonlinear Data", IMA, Minneapolis, MN: *Detection of Structural Breaks and Outliers in Time Series.*

Aug 25-26, 2011. 4th Annual Conference on Extreme Events; Stavanger, Norway (Distinguished Lecture): *Estimating Extremal Dependence in Time Series via the Extremogram*

Aug 1-5, 2011. 14th Brazilian Time Series and Econometrics School; Gramado, Brazil: *Some Models for Time Series of Counts.*

Aug 1-5, 2011. 14th Brazilian Time Series and Econometrics School; Gramado, Brazil (Plenary talk): *Estimating Extremal Dependence in Time Series via the Extremogram*

June 14, 2011. IAS/IGSSE Doctoral Symposium on "Statistical Space-time Modeling for Wind Power Forecasts," Munich. *"A Class of Stochastic Volatility Models for Environmental and Computer Experiment Applications*"

June 10, 2011. University of Ulm, Mathematics seminar: *Functional Convergence of Stochastic Integrals with Application to Inference in Time Series Models*

May 25-27, 2011. Interdisciplinary workshop on "Econometric and statistical modelling of multivariate time series", Louvain-la-Neuve (Belgium):

Apr 4-8, 2011. CIRM Workshop on "Dependence in Probability and Statistics", Marseille-Luminy: *Functional Convergence of Stochastic Integrals with Application to Inference in Time Series Models*

Feb 7-18, 2011. Nonlinear Time Series Workshop, National University of Singapore: *Estimating Extremal Dependence in Time Series via the Extremogram*

Nov 30-Dec 2, 2010. 7th International Iranian Workshop on Stochastic Processes, Tehran, Iran (Plenary talk): *Allpass Processes with Applications to Finance*.

Nov 30-Dec 2, 2010. 7th International Iranian Workshop on Stochastic Processes, Tehran, Iran (2-hour workshop): *Estimating Extremal Dependence in Time Series via the Extremogram*

Nov 16, 2010. IEOR-DRO Seminar, Columbia University: *Estimating Extremal Dependence in Time Series via the Extremogram*.

Oct 20–21, 2010. Alaska Chapter of ASA sponsored course, Kodiak, Alaska: *Short Course on Times Series* (14 hours of lectures).

Sep 9, 2010. IBM Watson Research Center, Yorktown Heights, NY: *Application of Heteroscedastic Spatial Models to Computer Experiments.*

Aug 9–13, 2010. 73rd Annual Meeting of IMS, Gothenburg, Sweden: *Another Look at Moving Average Models with a Unit Root.*

July 20, 2010. Inaugural Lecture of the IAS Focus Group "Risk Analysis and Stochastic Modeling", TUM: *Estimating Structural Breaks in Time Series*.

June 17–18, 2010. Fourth IGSSE Forum 2010, Raitlenhaslach, Germany: *Another Look at Non-invertible MA Models*.

Apr 26–30, 2010. CIRM Workshop on "Spatio-temporal approaches for risk modeling," Marseille-Luminy: *Measuring Extremal Dependence for Time Series and Spatial Processes via the Extremogram*.

Apr 19, 2010. Quantitative Financial Econometrics Seminar, Stern, NYU: *Estimating Extremal Dependence in Time Series via the Extremogram*.

Apr 16, 2010. Volatility and System Risk, Stern School of Business, NYU: *Discussant to Bryan Kelly's paper "Risk Premia and the Conditional Tails of Stocks Returns."*

Mar 30, 2010. Econometrics Seminar, Toulouse: *Structural Break Estimation in Time Series: Theory and Practice.*

Mar 26–27, 2010. Conference on Latest Developments in Heavy-Tailed Distributions, Brussels, Belgium: *Model Fitting for Autoregressive Processes with α-Stable Noise*.

Mar 24, 2010. Joint Econometrics and Statistics Seminar (CORE), Université catholique de Louvain, *The Extremogram: A Correlogram for Extreme Event*s.

Mar 19, 2010. Integration of Extremal Events in Quantitative Risk Management, Institut D'Economie Industrielle, Paris: *The Extremogram: a Correlogram for Extreme Events in a Time Series*.

Mar 9, 2010. Operations Research and Industrial Engineering Colloquium, Cornell University: *Allpass Processes with Application to Finance.*

Dec 17–19, 2009. Nonlinear Time Series: Threshold Modelling and Beyond: An International Conference in Honour of Professor Howell Tong, Hong Kong: *Another Look at Non-invertible MA Models*.

Nov 9–13, 2009. Spatio-temporal Extremes and Applications Workshop sponsored by Risk, Rare Events and Extremes Research Program, Bernoulli Center, Ecole Polytechnique Federale de Lausanne: Short course: *Space-time extremes in two parts:*

- *The extremogram: a correlogram for rare events*
- *Another look at Gaussian processes and associated copulae with a view towards spatial extremes*

Nov 3, 2009. Center for Statistical Sciences and Department of Applied Mathematics, Brown University: *Application of Heteroscedastic Spatial Model to Computer Experiments.*

Sep11–12, 2009. NSF/NBER Workshop in Time Series, Davis, CA: *The Extremogram: A Correlogram for Extreme Events.*

Aug 24–Aug 28, 2009. Oberwolfach Conference on "Challenges in Statistical Theory: Complex Data Structures and Algorithmic Optimization," Oberwolfach, Germany: *Application of Heteroscedastic Spatial Model to Computer Experiments.*

Jun 28–Jul 1, 2009. "First IMS Asia Pacific Rim Meetings," Seoul, Korea: *Spatial Models with Applications in Computer Experiments.*

May 14–15, 2009. New Directions in Asymptotic Statistics, Athens, GA, keynote address: *The Extremogram: A Correlogram for Extreme Events.*

May 7, 2009. Department of Statistics, University of California, Davis: *Allpass Processes with Applications to Finance.*

Apr 25, 2009. New England Statistics Symposium, University of Connecticut. Featured keynote address: *Allpass Processes with Applications to Finance.*

Apr 4–8, 2009. Fourth Brazilian Conference on Statistical Modelling in Insurance and Finance, Maresias, Brazil: *Heavy-Tailed Allpass Processes with Applications to Finance.*

Apr 1, 2009. Satellite Meeting, "New Trends in Actuarial Practice," Pontificia Universidade Catolica do Rio de Janeiro, Brazil: *The Extremogram: A Correlogram for Extreme Events.*

Mar 3, 2009. Department of Statistics, Michigan State University: *The Extremogram: A Correlogram for Extreme Events.*

Feb 12, 2009. Department of Statistics, University of Toronto: *The Extremogram: A Correlogram for Extreme Events*

Jan 13, 2009. The Chinese University of Hong Kong, Statistics Department Seminar: *Spatial Models with Applications in Computer Experiments*

Dec 2, 2008. Operations Research and Financial Engineering Colloquium, Princeton: *The Extromogram: A Correlogram for Extreme Events*

Nov 6–7, 2008. "Statistical Modelling Multivariate Dependence and Extremes in Finance," Oxford-Man Institute of Quantitative Finance, Oxford: *Heavy Tails and Financial Time Series Models.*

Nov 4, 2008. Joint Econometrics and Statistics Workshop Seminar, London School of Economics: *Structural Break Estimation in Time Series: Theory and Practice*

Oct 23, 2008. Econometrics Workshop, Columbia University: *Structural Break Estimation in Time Series: Theory and Practice*

Aug 3–7, 2008. Joint Statistical Meetings, Denver, CO. Session: Financial Economics, sponsored by the Business and Economic Statistics Section: *Inference for Lévy-Driven, Continuous-Time ARMA Processes.*

Jul 3, 2008. Université de Paris X, Nanterre Mathematics Seminar: *Structural Break Estimation in Time Series: Practice and Theory*

Jun 23–26, 2008. "Statistical Modeling of Extremes in Data Assimilation and Filtering Approaches," Strasbourg, France: *Spatial Models with Applications in Computer Experiments.*

Jun 23–26, 2008. "Statistical Modeling of Extremes in Data Assimilation and Filtering Approaches," Strasbourg, France: *Extreme Value Theory in Time Series Analysis.*

Jun 8–11, 2008. "Recent Advance in Time Series Workshop," Cyprus: *Maximum Likelihood Estimation for α-Stable and Allpass and Autoregressive Processes.*

Apr 23, 2008. Wharton Statistics Colloquium: *Structural Break Detection for Nonlinear Time Series*.

Apr 11, 2008. Joint Washington State University and University of Idaho Statistics and Applied Probability Seminar: *Structural Break Detection for Nonlinear Time Series*.

Apr 4, 2008. Princeton Day of Statistics: *Maximum Likelihood Estimation for α-Stable and Allpass and Autoregressive Processes.*

Apr 1, 2008. Applied Mathematics Colloquium, Columbia University: *Spatial Heteroscedastic Models with Applications in Computer Experiments.*

Feb 28–Mar 2, 2008. "Emerging Directions in Probability and Statistics": South Bend, IN: *Break Detection for a Class of Nonlinear Time Series Models.*

Feb 25–29, 2008. Oberwolfach Workshop "Time Series with Sudden Structural Breaks": *Some Theory Behind AutoPARM.*

Nov 30, 2007. IOMS Department Seminar, Stern School of Business, New York University: *Another Look at Estimation for MA(1) Processes with a Unit Root.*

Oct 31, 2007. Department of Statistics, Rutgers University: *Structural Break Detection in Time Series Models.*

Oct 26, 2007. Department of Statistics, University of Michigan: *Structural Break Detection in Time Series Models.*

Sep 16–19, 2007. SAMSI Opening Workshop on Risk Analysis, Extreme Events and Decision Theory, Raleigh, NC: *Heavy Tails and Financial Time Series Models.*.

Sep 7, 2007. Probability Seminar, Columbia University: *Another Look at Estimation for MA(1) Processes with a Unit Root.*

July 29–Aug 2, 2007. Joint Statistical Meetings, Salt Lake City, UT, Session: Nonlinear and Nonstationary Time Series Analysis: *Break Detection for a Class of Nonlinear Time Series Models.*

July 23–27, 2007. 5th Conference on Extreme Value Analysis, Bern, Switzerland: *Maximum Likelihood Estimation for α-Stable Autoregressive and Allpass Processes.*

May 23–26, 2007. Statistical Models for Financial Data II, Graz, Austria: *Inference for Lévy-driven Continuous-time ARMA Processes.*

Apr 24, 2007. College of Natural Sciences, Professor Laureate Lecture: *The Dynamics of Change: Volatility and Where to Find It.*

Apr 5, 2007. Clemson/University of Georgia Joint Seminar Lecture at Clemson: *Heavy Tails and Financial Time Series Models.*

Apr 4, 2007. Distinguished Lecturer in the Mathematical Sciences, Clemson University: *Structural Break Detection in Time Series Models.*

Jan 22, 2007. Department of Statistics, University of Chicago: *Another Look at Estimation for MA(1) Processes with a Unit Root.*

Nov 20–24, 2006. Oberwolfach-Seminar "Dependence and Tail Modelling with Applications to Finance, Insurance, Teletraffic, and Climate," Oberwolfach, Germany. Holger Drees, Thomas Mikosch, and Richard A. Davis, organizers and lecturers.

Nov 9, 2006. Workshop on Statistical Modelling in Insurance and Finance, Pontificia Universidade Catolica do Rio de Janeiro, Brazil: *Structural Break Detection in Time Series Models.*

Nov. 6–7, 2006. Workshop on Statistical Modelling in Insurance and Finance, Universidade de São Paulo, São Paulo, Brazil: *Structural Break Detection in Time Series Models.*

Nov. 6–7, 2006. Workshop on Statistical Modelling in Insurance and Finance, Universidade de São Paulo, São Paulo, Brazil: *Heavy Tails and Financial Time Series Models.*

Oct. 18–20, 2006. Time Series Analysis Course for the European Central Bank, Frankfurt, Germany. (18 hours of lectures).

Sep 1–4, 2006. International Conference on Statistics, Combinatorics, and Related Areas, Tomar, Portugal, Plenary Speaker: *Structural Break Detection for a Class of Time Series Models.*

Aug 21–25, 2006. Prague Stochastics 2006, Prague, The Czech Republic: *Another Look at Estimation for MA(1) Processes with a Unit Root.*

June 27–30, 2006. IMS Western Regional Meeting, Flagstaff, Arizona: *Structural Break Detection for a Class of Nonlinear Time Series Models.*

June 24–29, 2006. BIRS Workshop "Statistics at the Frontiers of Science", Banff International Research Station, Banff, Canada: *Structural Break Detection in Time Series Models*.

June 8–9, 2006. "Extremes in Action: Symposium for Georg Lindgren," Lund, Sweden: *Extremes of Space-Time Processes with Heavy Tails.*

May 1, 2006. Department of Statistics, Columbia University, New York: *Structural Break Detection in Time Series Models*.

Apr 27, 2006. Department of Statistics, University of California, Davis. *Structural Break Detection in Time Series Models*.

Jan 23–25, 2006. Waseda Workshop on Time Series Analysis and Its Related Topics, Waseda University, Tokyo, Japan: *Laplace Likelihood and LAD Estimation for Non-invertible MA(1)*.

Dec 12–14, 2005. Statistics and Probability Conference in Memory of Ching-Zong Wei, Academia Sinica, Taipei: *Structural Break Detection in Time Series Models*.

Dec 2–4, 2005. International Meeting on Statistics, Combinatorics, Mathematics, and Applications, Auburn University, Auburn, Alabama: *Structural Break Detection in Time Series Models*.

Nov 9, 2005. Charles University, Prague, The Czech Republic: *Structural Break Detection in Time Series Models*.

Sep 22–24, 2005. NSF/NBER Workshop in Time Series, Heidelberg, Germany: *Laplace Likelihood and LAD Estimation for Non-invertible MA(1).*

Sep 20–21, 2005. Nonlinear and Nonstationary Time Series Workshop, Kaiserslautern, Germany: *Structural Break Detection in Time Series Models*.

Sep 7–9, 2005. Fourth Annual Conference Statistics for Aquatic Resources, Corvallis, Oregon: *Structural Break Detection in Time Series Models*.

Jul 17–20, 2005. IEEE Conference on Signal Processing, Bordeaux, France: *Structural Break Detection in Time Series Signals*.

Jul 6–8, 2005. 13th INFORMS Applied Probability Conference, Ottawa, Canada: *Structural Break Detection in Time Series Models*.

May 21–22, 2005. CIRANO-CIREQ Financial Econometrics Conference, University of Montreal, Montreal, Canada: *Structural Break Estimation in Time Series Models.*

Apr 22–24, 2005. Workshop on Heavy Tails and Long Range Dependence, Cornell University: *Heavy Tails and Financial Time Series Models.*

Mar 25, 2005. Inaugural Alaska Consortium for Environmental Statistics (ACES), University of Alaska, Fairbanks, Alaska: *Thoughts on Model Selection.*

Mar 24, 2005. Public Lecture Sponsored by Alaska Consortium for Environmental Statistics, Fairbanks, Alaska: *Financial Time Series, Nobel Prize, and Ecology.*

Oct 25–27, 2004. INFORMS Annual Meeting 2004, Denver, Colorado: *Regular Variation and Financial Time Series Models.*

Oct 21, 2004. Mathematics Colloquium, Washington University, St. Louis: *Structural Break Detection in Time Series Models.*

Oct 8, 2004. Mini-Course sponsored by Department of Statistics, University of Lisbon, Lisbon, Portugal.

- *Regular Variation and Financial Time Series Models*
- *Structural Break Detection in Time Series Models*

Oct 5, 2004. Department of Mathematical Statistics, Lund University, Lund, Sweden. *Structural Break Detection in Time Series Models.*

Oct 1, 2004. MaPhySto Workshop on "Nonlinear Time Series Modeling" sponsored by the Danish National Research Foundation Network in Mathematical Physics and Stochastics, Copenhagen, Denmark: *Extreme Value Theory for Space-Time Processes with Heavy-Tailed Distributions.*

Sept 27–30, 2004. MaPhySto concentrated advance course on "Nonlinear Time Series Modeling" sponsored by the Danish National Research Foundation Network in Mathematical Physics and Stochastics, Copenhagen, Denmark.

- Introduction to Linear and Nonlinear Time Series (4 lectures)
- Time Series Models in Finance (4 lectures)
- Nonlinear and NonGaussian State-Space Models (3 lectures)
- Structural Break Estimation in Time Series (2 lectures)

July 19–23, 2004. Third International Symposium on Extreme Value Theory: Theory and Practice. Aveiro, Portugal. *Extreme Value Theory for Space-Time Processes with Heavy-Tailed Distributions.*

July 12–16, 2004. Australian Statistics Conference and the International Biometrics Conference, Cairns, Australia (Keynote address): *Model Selection for Geostatistical Models.*

June 9–12, 2004. International Workshop on Recent Advances in Time Series Analysis, Protaras, Cyprus (Keynote address): *Structural Break Detection in Time Series.*

June 9–12, 2004. International Workshop on Recent Advances in Time Series Analysis, Protaras, Cyprus (Keynote address): *Parameter- and Observation-Driven State Space Models.*

May 19–22, 2004. Second Lehmann Symposium, Rice University, Houston, Texas: *Regular Variation and Financial Time Series Models.*

March 31, 2004 Department of Statistical Science, Cornell University. *Estimation for State-Space Models with Application to Structural Break Detection.*

Mar 22–25, 2004. International Workshop in Applied Probability, Piraeus, Greece: *Estimation for Generalized State-Space Models.*

Feb 28–29, 2004. International Symposium on Financial Time Series, Tokyo, Japan: *Estimation for State-Space Models.*

Dec 4, 2003. Statistics in Ecology Workshop, Jackson Hole, Wyoming: *Model Selection for Geostatistical Models*. (Talk given by Jennifer Hoeting).

November 12, 2003. Department of Mathematics and Applied Statistics, University of Wollongong: *R-Estimation for All-Pass Time Series Models.*

October 15, 2003. Department of Statistics, University of Copenhagen: *Estimation for State-Space Models: an Approximate Likelihood Approach.*

Oct 2–5, 2003. International Conference on Statistics, Combinatorics, and Related Areas, Portland, Maine, Plenary speaker: *Estimation for Parameter-Driven State-Space Models.*

September 3, 2003. Department of Statistics, University of New South Wales: *Estimation for State-Space Models: an Approximate Likelihood Approach.*

Aug 23–25, 2003. NSF/NBER Workshop in Time Series, University of Chicago: *Estimation for State-Space Models: an Approximate Likelihood Approach.*

November 13, 2002. Joint Mathematics and Statistics Distinguished Lecture Series, University of Wyoming: *Estimation for Nonlinear State-Space Models.*

October 30, 2002. Statistics Colloquium, University of Connecticut: *Application of the Innovations Algorithm to Nonlinear State-Space Models.*

October 29, 2002. IBM Watson Research Center, Yorktown Heights, NY: *Application of the Innovations Algorithm to Nonlinear State-Space Models.*

Sept 2–3, 2002. Academy Colloquium Masterclass, The Royal Netherlands Academy of Science, Amsterdam, Netherlands: *The Innovations Algorithm and Parameter Driven Models.*

Aug 29–31, 2002. Academy Colloquium, "State Space and Unobserved Components Models in Honour of James Durbin," The Royal Netherlands Academy of Science, Amsterdam, Netherlands: *Observation Driven Models for Time Series of Counts.*

Aug 11–15, 2002. Joint Statistics Meetings, New York City: *Observation Driven Models for Time Series of Counts.*

July 15–19, 2002. International Conference on Current Advances and Trends in Nonparametric, Crete, Greece: *Maximum Likelihood and R- Estimation for All-Pass Time Series Models*.

June 14–16, 2002. Fourth Biennial Conference on Statistics, Probability and Related Topics, Northern Illinois University: *Maximum Likelihood Estimation for All-Pass Time Series Models*.

Mar 19–21, 2002. German Open Conference on Probability and Statistics, Magdeburg, Germany: *Maximum Likelihood Estimation for All-Pass Time Series Models*.

Jan 14–17, 2002. International Workshop on Applied Probability (plenary speaker) Caracas, Venezuela: *Applications of multivariate regular variation and point processes to financial time series.*

Nov 12–16, 2001. IMA Workshop: Time Series Analysis and Applications to Geophysical Systems, Minneapolis, MN: *Maximum Likelihood Estimation for All-Pass Models.*

Oct 29 – Nov 2, 2001. Oberwolfach Conference on stable laws and processes, Oberwolfach, Germany: *Limit Theory for Some Non-linear Time Series Models Including GARCH and Stochastic Volatility Models.*

September 27, 2001. Mathematics and Statistics Colloquium, Utah State University: *Linear Time Series with Nonlinear Behavior*.

June 25, 2001. Satellite Meeting of Japan-US Seminar on Time Series, ISM, Tokyo, JAPAN: *Modeling Time Series of Counts*.

June 18–22, 2001. Japan-US Seminar on Time Series, Kyoto, JAPAN: *Limit Theory for Some Nonlinear Time Series Models Including GARCH and Stochastic Volatility Models*.

April 20, 2001. Mathematics Colloquium, U. of North Carolina, Charlotte: *Sample Autocorrelation Functions for Financial Time Series Models.*

Nov 17, 2000. Applied Mathematics Colloquium, U. of Colorado: *Multivariate Regular Variation with Application to Financial Time Series Models.*

Nov 8, 2000. Econometrics and Statistics Colloquium, sponsored by the Graduate School of Business and the Statistics Department, University of Chicago: *Sample Autocorrelation Functions for Financial Time Series Models.*

September 17–21, 2000. First European Conference on Spatial and Computational Statistics, Ambleside, UK: *Modeling Time Series of Counts*.

June 15, 2000. Miniconference on Probability and Statistics, University of Groningen, Netherlands: *Modeling Time Series of Counts*.

May 15–20, 2000. Fifth World Congress of the Bernoulli Society for Probability and Mathematical Statistics, Guanajuato, Mexico: *Linear Processes with Nonlinear Behavior*.

May 10–12, 2000. Symposium on Inference for Stochastic Processes, Athens, Georgia: *Linear Processes with Nonlinear Behavior.*

Apr 12, 2000. Econometrics Seminar, Ohio State University: *Limit Theory for Some Nonlinear Time Series Models Including GARCH and Stochastic Volatility Models*.

Apr 11, 2000. Statistics Colloquium, Ohio State University: *Linear Processes with Nonlinear Behavior.*

Dec 10, 1999. Workshop on Extreme Values and Financial Risk, Munich University of Technology, Munich, Germany: *Linear Time Series Models with Nonlinear Behavior.*

Dec. 9, 1999. Demonstration of the ITSM2000 software, Munich University of Technology, Munich, Germany.

Oct 2–6, 1999. Workshop on Extreme Values and Additive Laws, Lisbon (Estoril), Portugal: *Linear Time Series Models with Nonlinear Behavior*.

Aug 30, 1999. Academia Sinica, Institute of Statistical Science, Taipei, Taiwan: *Limit Theory for Some Nonlinear Time Series Models.*

Aug 23–25, 1999. NSF/NBER Workshop in Time Series, Academia Sinica, Taipei, Taiwan: *Linear Time Series Models with Nonlinear Behavior*.

April 26–28, 1999. Workshop on Nonlinear Stochastic Models in Finance, EURANDOM, Eindhoven, The Netherlands.

Apr 22, 1999. University of Groningen, Department of Mathematics: *Recent Developments in the Unit Root Problem for Moving Averages.*

March 28–31, 1999. IMS Spring Meeting, Atlanta, GA. Session: *Invited session on Current Issues in Time Series Analysis.*

Nov 18–19, 1998. Satellite Meeting of Young Dutch Statisticians and Probabilists, Lunteren, Netherlands (2 Lectures).

Nov 16–18, 1998. Annual Meeting of Dutch Statisticians and Probabilists, Lunteren, Netherlands (2 lectures).

Nov 14, 1998. University of Groningen, Department of Mathematics: *Estimation for Nonstandard Time Series Models.*

October 12–16, 1998. Econometrics and Financial Time Series Workshop, Newton Institute, Cambridge University, UK: *Asymptotic Theory for Some Nonlinear Time Series Models*.

August 18–22, 1998. Extreme Value Theory Workshop, Gothenborg, Sweden.

Apr 23, 1998. Colorado State University, Dept of Mathematics: *Limit Theory for Nonlinear Time Series Models.*

Apr 10, 1998. Colorado School of Mines, Dept of Mathematics: *LAD estimation for time series models.*

March 23–27, 1998. Workshop on Time Series sponsored by Centre de Recherches Mathematiques (CRM), Universite de Montreal, Canada: *Modeling Time Series of Counts*.

Jan 30, 1998. University of Colorado at Colorado Springs, Dept of Mathematics: *LAD estimation for time series models.*

Oct. 10–11, 1997. NSF/NBER Workshop in Time Series, Duke University: *Recent advances in the unit root problem for MA(1) processes*.

Jun 1–3, 1997. Canadian Statistical Society Annual Meeting, New Brunswick, Canada.

May 4–7, 1997. INFORMS Meeting, San Diego, CA.

Feb 1–18, 1997. Oberwolfach Conference on Extremes and Point Processes, Oberwolfach, Germany: *Point Process Theory of Bilinear and Stochastic Volatility Models*.

Jan 31, 1997. University of Bern, Dept of Statistics: *LAD estimation for time series models.*

Dec 6, 1996. University of Gothenburg, Dept of Mathematics: *Opponent for Nader Tajvidi's PhD thesis defense.*

Dec 5, 1996. University of Gothenburg, Dept of Mathematics: *LAD estimation for time series models.*

Sept 27–29, 1996. First NIU Symposium on Statistical Science, Northern Illinois: *Recent Advances in the Unit Root Problem in Time Series.*

Aug 23, 1996. Satellite Conference on Heavy Tailed Phenomena, Wroclaw, Poland: *Inference for Linear Processes with Stable Noise.*

Dec 12, 1995. Cornell University, Dept of ORIE: *Inference for MA(1) processes with a root on or near the unit circle.*

Dec 2, 1995. Workshop on Stable Distributions, Santa Barbara, CA: *Estimation for ARMA models with heavy tailed noise.*

Nov 17–18, 1995. NSF/NBER Workshop in Time Series, Harvard University: *LAD estimation for time series models*.

May 17, 1995. RMIT, Dept of Statistics: *LAD Estimation in Time Series.*

Oct 30–31, 1995. Workshop on time series, Washington Statistical Society, Washington D.C. (10 hours of lectures).

Mar 24, 1995. Workshop on Time Series, U. New South Wales, Australia: *LAD Estimation in Time Series.*

Mar 17, 1995. U. of Sydney, Dept of Statistics: *Inference for MA(1) processes with a root on or near the unit circle.*

Nov 17, 1994. U. of Georgia, Dept of Statistics: *Inference for MA(1) processes with a root on or near the unit circle.*

Oct 26, 1994. Yale University, Dept of Econometrics: *Inference for MA(1) processes with a root on or near the unit circle.*

Oct 24, 1994. U. of Heidelberg, Germany, Dept of Statistics: *Inference for MA(1) processes with a root on or near the unit circle.*

Oct 20–21, 1994. Topics in Statistics, U. of Bern, Switzerland, Dept of Statistics: *4 Lectures on Time Series.*

May 25, 1994. UNSW, Dept of Statistics: *Processes With Infinite Variance.*

May 23, 1994. RMIT, Dept of Mathematics: *Processes With Infinite Variance*.

Oct 28, 1993. University of Gothenburg, Dept of Mathematics: *Inference for MA(1) processes with a root on or near the unit circle.*

Oct 25, 1993. Lund University, Dept of Statistics: *Inference for MA(1) processes with a root on or near the unit circle.*

Oct 21–23, 1993. NSF/NBER Workshop in Time Series, Vienna, Austria: *Inference for MA(1) processes with a root on or near the unit circle.*

Mar 1993. 2nd International Symposium: Probability and Applications, Bloomington, IN: Session: *Heavy Tail Modeling and Long Range Dependence.*

Nov 13, 1992. York University, Dept of Mathematics: *Point process and partial sum convergence for weakly dependent random variables with infinite variance.*

Nov 12, 1992. University of Toronto, Dept of Statistics: *Inference for MA(1) processes with a root on or near the unit circle.*

Aug 1992. Annual Meeting of ASA/IMS, Boston, MA: Session: *Computational Methods in Time Series.*

Apr 3, 1992. University of Northern Illinois, Dept of Mathematics: *Improved Bootstrap Forecast Intervals for Autoregressions.*

Apr 2, 1992. University of Illinois, Dept of Statistics: *Order Determination for Autoreggressive Processes Using Resampling Methods.*

Feb 21, 1992. NYU School of Business: *Improved Bootstrap Forecast Intervals for Autoregressions.*

Nov 19, 1991. Australian Statistical Association, Brisbane Chapter Meeting: *Order Determination for Autoregressive Processes Using Resampling Methods.*

Oct 19–20, 1990. NBER/NSF Workshop in Time Series, La Jolla, CA: *Time-reversibility, Identifiably, and Independence of Innovations for Stationary Time Series*.

Jul 2–27, 1990. Time Series Analysis Workshop, University of Minnesota: *On Noncausal AR Processes, Reversibility, Identifiably, and Estimation.*

Aug 1988. IMS Symposium on Probability and Its Applications, Ft. Collins, CO: Session: *Extreme Value Theory and Applications.*

Dec 1987. Oberwolfach Conference on Dependence in Probability and Statistics, Oberwofach, Germany.

Aug 1986. Annual Meeting of IMS/ASA, Chicago, IL: Session: *Inference for Stochastic Processes.*

Aug 1986. Nordic Research Course on Extreme Value Theory, Bastad, Sweden.

Aug 1985. 45th Session of the International Statistical Institute, Amsterdam, Holland: Session: *Multivariate Extremes.*

Mar 10–15, 1984. Oberwolfach Conference on Extremes and Point Processes, Oberwolfach, Germany.

Research Grant History

Office of Naval Research, ONR N0014-75-C-0428. Two months' salary. 1978, Mathematics Department, University of California at San Diego.

National Science Foundation, NSF MCS 78-01108. Four months' salary. 1979, Mathematics Department, University of California at San Diego.

National Science Foundation, NSF MCS 79-04474. Two months' salary. 1980, Mathematics Department, M.I.T.

National Science Foundation, NSF MCS 80-05483. Two months' salary. 1981, Mathematics Department, M.I.T.

National Science Foundation, NSF MCS 82-92335. Two months' salary. Principal Investigator (with P. J. Brockwell and S. I. Resnick), 1982–1985, Statistics Department, Colorado State University.

National Science Foundation: Travel grant to attend a NATO Advance Study Institute in Vimeiro, Portugal, 1983.

ASA Travel Grant to attend 45th Session of the International Statistical Institute, Amsterdam, Holland, August 12–22, 1985.

National Science Foundation, NSF MCS 85-01763. Two months' salary. Principal Investigator (with P. J. Brockwell and S. I. Resnick), 1985–1988, Statistics Department, Colorado State University.

National Science Foundation, NSF MCS 88-02559. Two months' salary. Principal Investigator, 1988–1991, Statistics Department, Colorado State University.

National Science Foundation (SCREMS) NSF DMS 9105745. The award consisted of $20,000 with $30,000 matching funds from CSU for computer equipment. Principal Investigator (with P. J. Brockwell), 1991–1992, Statistics Department, Colorado State University.

National Science Foundation, NSF DMS 9100392. Two months' salary. Principal Investigator (with P. J. Brockwell), 1991–1994, Statistics Department, Colorado State University.

National Science Foundation, NSF DMS 9504596 . $210,000. Principal Investigator (with P. J. Brockwell and M. Rosenblatt), 1995–1998, Statistics Department, Colorado State University.

ARS-USDA grant for prediction of peak power demand (2-month salary plus 2-year graduate student support), Aug `97–May `99.

ARS-USDA grant "Statistical Modeling for Farm Operations" (Co-PI with J. Hoeting) $20K 1999. (supports graduate student and some salary for Hoeting).

USDA-USFS - Rocky Mtn. Research Station - CO "Statistical Estimation for Annual Forest Inventory and Modeling" $29K 1999. (Supports graduate student on a research project.)

USDA Forest Service, "Small Area Estimation Techniques" $27K, 1999. (Supports graduate student on a research project.)

National Science Foundation, NSF DMS-9972015. $200,000. Principal Investigator (with P. J. Brockwell), 1999–2002, Statistics Department, Colorado State University.

Environmental Protection Agency (STAR-Program), "Applying Spatial and Temporal Models of Statistical Surveys to Aquatic Resources" ($3 million) (Co-PIs: Davis and Urquhart), 2001–2005, Statistics Department, Colorado State University.

National Science Foundation IGERT Program, NSF DMS-0221595. $2.85M. "Program for Interdisciplinary Mathematics, Ecology, and Statistics (PRIMES)." (PI R. Davis; co-PIs D. Estep, T. Hobbs, R. Miranda), 2003–2008, Colorado State University.

National Science Foundation, NSF DMS-0308109. $450,000. "Applied Probability and Time Series Modeling." (Co-PI with P. J. Brockwell), 2003–2006, Statistics Department, Colorado State University.

2003 IBM Faculty Award "Estimation for Time Series Models with Structural Breaks", $40,000.

National Science Foundation, NSF EF-0434354. $500,000. "Applied MSPA-CSE: Novel A Posteriori Analysis of Ecological Models: The Carbon Cycle." (PI D. Estep; co-PIs D. Ojima, F. J. Breidt, R.A. Davis), 2004–2007, Colorado State University.

National Science Foundation, NSF DMS-0529803. $5,000. REU "Applied Probabilty and Time Series Modeling" (support for undergraduate student Michael Li) 2005.

CSU Academic Enrichment Program for Bioinformatics $1.3M (principal writer with Tom Holtzer, Jeff Wilusz, and Hari Iyer).

National Science Foundation, NSF DMS-0743459 & 0744058. $330,000. "Collaborative Research: Applied Probability and Time Series Modeling." (PI with P. J. Brockwell at CSU), 2007–2011, Statistics Departments at Columbia University and Colorado State University.

National Science Foundation, NSF DMS "Sixth International Conference on Extreme Value Analysis." (PI: R. Davis) 2009, Statistics Department at Columbia University.

National Science Foundation, NSF DMS-1107031 & 1106814. $300,000 and $97,215. "Collaborative Research: Applied Probability and Time Series Modeling." (PI with P. J. Brockwell at Columbia and Hernando Ombao at Brown University), 2011–2014, Statistics Department at Columbia University and Biostatistics Department at Brown University.

Army Research Office MURI Grant ($3.75M, W911NF-12-1-0385) "Multivariate Heavy Tail Phenomena: Modeling and Diagnostics" (PI: S. Resnick(Cornell); co-PIs: R. Davis (Columbia), W. Gong and D. Towsley (UMass), J. Nolan (American U), G. Samorodnitsky and L. Tong (Cornell), N. Shroff (Ohio State), R. Srikant (Illinois)) August 16, 2012—August 15, 2015. ($550K subaward 66220-9900 to Columbia.) Extensions through Sept 30, 2018: $183K. Total to Columbia: $733K.

National Science Foundation, NSF DMS-2015379 ($300K) & DMS-2015242 ($300K). "Collaborative Research: Extremes in High Dimensions: Causality, Sparsity, Classification, Clustering, Learning" (PI, co-PI Marco Avella Medina, PI Gennady Samorodnitsky Cornell University), 2020–2023, Statistics Department at Columbia University and ORIE at Cornell University.

Book Reviews

Lambert, P. J. and Poskitt, D.S., Stationary Processes in Time Series Analysis, *JASA 79* (1984), 484.

Leadbetter, M. R., Lindgren, G. and Rootzen, H., Extremes and Related Properties of Random Sequences and Processes, *JASA 80* (1985), 251.

Tanaka, Katuso, Time Series Analysis: Nonstationary and Noninvertible Distribution Theory, *JASA 93* (1998), 834–835.

Software

Brockwell, P.J., Davis, R.A., and Mandarino, J.V. (1987). *Time Series: Theory and Methods Software*. Springer-Verlag, New York.

Brockwell, P.J. and Davis, R.A. (1991). *ITSM: An Interactive Time Series Modeling Package for the PC* . Springer-Verlag, New York.

Brockwell, P.J. and Davis, R.A. (1992). *ITSM: An Interactive Time Series Modelling Package for the SPARC workstation*. Springer-Verlag, New York.

Brockwell, P.J. and Davis, R.A. (2000). *ITSM2000* A new windows release of the ITSM software on CD that accompanies the fourth printing of the book, *Introduction to Time Series and Forecasting*. Springer-Verlag, New York.

Books

Brockwell, P.J. and Davis, R.A. (1987). *Time Series: Theory and Methods*. Springer-Verlag, New York.

Brockwell, P.J. and Davis, R.A. (1991). *Time Series: Theory and Methods, 2nd Edition.* Springer-Verlag, New York. (Chinese translation published in 2001, paperback in 2009.)

Brockwell, P.J. and Davis, R.A. (1991). *ITSM: An Interactive Time Series Modeling Package for the PC (the manual for ITSM).* Springer-Verlag, New York.

Brockwell, P.J. and Davis, R.A. (1994). *ITSM for Windows: A guide to time series modeling.* Springer-Verlag, New York.

Brockwell, P.J. and Davis, R.A. (1996). *Introduction to Time Series and Forecasting.*, Springer-Verlag, New York. (Japanese translation published in 1999.)

Brockwell, P.J. and Davis, R.A. (2002). *Introduction to Time Series and Forecasting, 2nd Edition.* Springer-Verlag, New York.

Andersen, T. G., Davis, R.A., Kreiss, J.-P., Mikosch, T. *editors.* (2009). *Handbook of Financial Time Series*. Springer-Verlag, New York.

Davis, R.A., Lii, K-S, and Politis, D., editors, (2011). *Selected Works of Murray Rosenblatt,* Springer Science + Business Media, LLC.

Davis, R.A., Holan, S., Lund, R. and Ravishanker, N. (2016). *Handbook of Discrete-Valued Time Series,* Chapman and Hall.

Brockwell, P.J. and Davis, R.A. (2016). *Introduction to Time Series and Forecasting, 3rd Edition.* Springer-Verlag, New York. 8-9.

Interviews/Special Edited Issues/Other

Brillinger, David R. and Davis, Richard A. (2009). "A Conversation with Murray Rosenblatt", *Statistical Science* **24**, 116–140.

Pourahmadi, Mohsen and Davis, Richard (2010). Special Issue in Honor of Emanuel Parzen on the Occasion of his 80th Birthday and Retirement from the Department of Statistics, Texas A&M University. *Journal of Statistical Planning and Inference*, **140** (Issue 12), 3577-3874.

Davis, Richard and Mikosch, Thomas (2013). Special issue of Bernoulli Journal in celebration of the 300th anniversary of the publication of Jacob Bernoulli's "Ars conjectandi", **19,** 4, 1-450.

Davis, Richard (2016). IMS Presidential Address "Are We Meeting the Challenge?" *IMS Bulletin, **45**, 7*, pages 1, 4—7.

Davis, R.A., Guillou, A., and Segers, J. (2017). Guest editor of "Statistics of Extremes and Applications", special issue of the *Journal of Econometrics and Statistics*.

Davis, R.A. (2018). Special Selection in Memory of Stephen E. Fienberg (1942–2016). *Annals of Applied Statistics,* **12.** p. v.

Bradley, R. and Davis, R.A. (2019). "Obituary: Murray Rosenblatt." *Bulletin of IMS*, **48.**

Bradley, R., Davis, R.A., and Politis, D. (2021). Special issue of *Journal of Time Series in memory of Murray Rosenblatt.*

Papers

Davis, R.A. (1979). Maxima and minima of stationary processes. *Annals of Probability* **7**, 453–460.

Chernick, Michael R. and Davis, Richard A. (1982). Extremes in autoregressive processes with uniform marginal distributions. *Statistics and Probability Letters* **1**, 85–88.

Davis, R.A. (1982). The rate of convergence in distribution of the maxima, *Statistica Neerlandica* **36**, 31–35.

Davis, R.A. (1982). Extremes of one-dimensional diffusions. *Stochastic Processes and Their Applications* **13**, 1–9.

Davis, R.A. (1982). Limit laws for the maximum and minimum of stationary sequences. *Z. Wahrscheinlichkeitstheorie und verw Gebiete* **61**, 31–42.

Davis, R.A. (1983). Limit laws for upper and lower extremes from stationary mixing sequences. *J. Multivariate Analysis* **13**, 273–286.

Davis, R.A. (1983). Stable limits for partial sums of dependent random variables. *Annals of Probability* **11**, 262–269.

Davis, R.A. (1984). On upper and lower extremes in stationary sequences. *Statistical Extremes and Applications*, Tiago de Oliveira, Ed., 443–460. Reidel Publishing Company.

Davis, R.A. and Resnick, S.I. (1984). Tail estimates motivated by extreme value theory. *Annals of Statistics* **12**, 1467–1487.

Davis, R.A., Marengo, J., and Resnick, S.I. (1985). Extremal properties of a class of multivariate moving averages. *Proceedings of the 45th Session of the International Statistical Institute*, **Vol. 4**, Amsterdam. (With discussion. *Bull. Inst. Internat. Statist.* **Vol. V**, (1985), 185–192.)

Davis, R.A. and Resnick, S.I. (1985). Limit theory for moving averages of random variables with regularly varying tail probabilities. *Annals of Probability* **13,** 179–197.

Davis, R.A. and Resnick, S.I. (1985). More limit theory for the sample correlation function of moving averages. *Stochastic Processes and Their Applications* **20**, 257–279.

Davis, R.A. and Resnick, S.I. (1986). Limit theory for the sample covariance and correlation function of moving averages. *Ann. Statist*. **14**, 533–558.

Davis, R.A. and Resnick, S.I. (1986). Limit theory for the sample correlation function of moving averages. *Dependence in Probability and Statistics* (Eberlein and Taqqu, Editors). Birkhäuser, 417–426.

Yao, Y.C. and Davis, R.A. (1986). The asymptotic behavior of the likelihood ratio statistic for testing a shift in mean in a sequence of independent normal variables. *Sankya* **48**, 339–353.

Davis, R.A., Mulrow, E., and Resnick, S.I. (1987). The convex hull of a random sample in R^2. *Stochastic Models* **3**, 1–28.

Brockwell, P.J. and Davis, R.A. (1988). On the applications of innovation representation in time series analysis. *Probability and Statistics: Essays in Honor of Franklin A. Graybill* (J. N. Srivastava, editor). North Holland, 61–84.

Brockwell, P.J. and Davis, R.A. (1988). Simple consistent estimation of the coefficients of a linear filter. *Stochastic Processes and Their Applications*, 47–59.

Davis, R.A. (1988). Discussion of 'Extreme values-theory and technical applications' by G. Lindgren and H. Rootzén. *Scandinavian Journal of Statistics* **14**, 271–274.

Davis, R.A., Mulrow, E., and Resnick, S.I. (1988). Almost sure limit sets of random samples in R^d. *Adv. Appl. Prob.* **20**, 573–599.

Davis, R.A. and Resnick, S.I. (1988). Extremes of moving averages of random variables from the domain of attraction of the double exponential distribution. *Stochastic Processes Appl.* **30**, 41–68.

Boes, D.C., Davis, R.A., and Gupta, S. (1989). Parameter estimation in low order fractionally differenced ARMA processes. *Stochastic Hydrol. and Hydraul.* **3**, 97–110.

Davis, R.A. and McCormick, W.P. (1989). Estimation for first-order autoregressive processes with positive or bounded innovations. *Stochastic Processes and Their Applications* **31**, 237–250.

Davis, R.A. and Resnick, S.I. (1989). Basic properties and prediction of max-ARMA processes. *Adv. App. Prob.* **21**, 781–803.

Breidt, F.J., Davis, R.A., Lii, K.S., and Rosenblatt, M. (1990). Nonminimum phase non-Gaussian autoregressive processes. *Proc. Natl. Acad. Sci.* **Vol. 87**, 179–181.

Davis, R.A. and Marengo, J. (1990). Limit theory for the sample covariance and correlation matrix function of a class of multivariate linear processes. *Stochastic Models* **6**, 483–498.

Breidt, F.J., Davis, R.A., Lii, K.S., and Rosenblatt, M. (1991). Maximum likelihood estimation for noncausal autoregressive processes, *J. Multivariate Analysis* **36**, 175–198.

Brockwell, P.J., Davis, R.A., and Salehi, H. (1991). A state-space approach to transfer-function modeling. *Statistical Inference in Stochastic Processes* (N.U. Prabhu and I.V. Basawa, Editors). Marcel Dekker, 233–248.

Davis, R.A. and Resnick, S.I. (1991). Extremes of moving averages of random variables with finite endpoint. *Ann Probability* **19**, 312–328.

Davis, R.A. and Rosenblatt, M. (1991). Parameter estimation for some time series models without contiguity. *Statistics and Probability Letters* **11**, 515–521.

Breidt, F.J. and Davis, R.A. (1992). Time-reversibility, identifiably, and independence of innovations for stationary time series. *J. of Time Series Analysis* **13**, 377–390.

Breidt, F.J., Davis, R.A., and Dunsmuir, W.T.M. (1992). On backcasting in linear time series models. *New Directions in Time Series Analysis, Part I* (Brillinger, Caines, Geweke, Parzen, Rosenblatt, and Taqqu, editors). Springer-Verlag, 25–40.

Brockwell, P.J., Davis, R.A., and Salehi, H. (1992). Transfer function models with non-stationary inputs. *New Directions in Time Series Analysis, Part I* (Brillinger, Caines, Geweke, Parzen, Rosenblatt, and Taqqu, editors). Springer-Verlag, 65–74.

Davis, R.A., Knight, K., and Liu, J. (1992). M-estimation for autoregressions with infinite variance. *Stochastic Processes and Their Applications* **40**, 145–180.

Chen, C., Davis, R.A., Brockwell, P.J., and Bai, Z.D. (1993). Order determination for autoregressive processes using resampling methods. *Statist. Sinica* **3**, 481–500.

Davis, R.A. and Resnick, S.I. (1993). Prediction of stationary max-stable processes. *Ann. of Applied Prob* **3**, 497–525.

Davis, R.A., Yao, Y.C., and Huang, D. (1994). On almost sure convergence of change-point estimators. *Change-point Problems* (Carlstein, Müller and Siegmund, editors). Institute of Mathematical Sciences, Lecture Notes-Monograph Series, **Volume 23**, 359–372.

Breidt, F.J., Davis, R.A., and Dunsmuir, W.T.M. (1995). Improved bootstrap forecast intervals for autoregressions. *J. Time Series Anal.* **16**, 177–200.

Davis, R.A., Chen, M., and Dunsmuir, W.T.M. (1995). Inference for MA(1) processes with a root on or near the unit circle. Invited paper in *Probability and Mathematical Statistics, Issue in Honour of Neyman's 100 Birthday* **15**, 227–242.

Davis, R.A. and Hsing, T. (1995). Point process and partial sum convergence for weakly dependent random variables with infinite variance. *Ann Probab*, **23**, 879–917.

Davis, R.A., Huang, D. and Yao, Y.C. (1995). Testing for a change in the parameter values and order of an autoregressive model. *Ann. Statist*. **23**, 282–304.

Davis, R.A. and Resnick, S.I. (1995). Crossings of max-stable processes. *J. Appl. Prob*. **31**, 130–138.

Donahue, R., Brockwell, P.J., and Davis, R.A. (1995). On permissible correlations for a class of stationary spatial processes. *Stat. and Prob. Letters* **22**, 49–53.

Chen, C., Davis, R.A., and Brockwell, P.J. (1996). Order determination for multivariate autoregressions using resampling methods. *J. Multivariate Analysis*, **57**, 175–190.

Davis, R.A., Chen, M., and Dunsmuir, W.T.M. (1996). Inference for Seasonal Moving Average Models With a Unit Root. *Athens Conference on Applied Probability and Time Series: Volume II: Time Series Analysis in Memory of E.J. Hannan* (P.M. Robinson and M. Rosenblatt, editors), Springer-Verlag, 160–176.

Davis, R.A. (1996). Gauss-Newton and *M*-Estimation for ARMA Processes With Infinite Variance. *Stoch. Process Appl*. **63**, 75–95.

Davis, R.A. and Dunsmuir, W.T.M. (1996). Maximum likelihood estimation for MA(1) processes with a root on or near the unit circle. *Econometric Theory* **12**, 1–29.

Davis, R.A. and Resnick, S.I. (1996). Limit Theory for Bilinear Processes with Heavy Tailed Noise. *Ann. of Applied Prob.* **6**, 1191–1210.

Calder, M. and Davis, R.A. (1997). Introduction to Whittle (1953) "The Analysis of Multiple Stationary Time Series", *Breakthroughs in Statistics*, **Volume 3** (Kotz and Johnson, editors), Springer-Verlag, 141–148.

Davis, R.A. and Dunsmuir, W.T.M. (1997). Least Absolute Deviation Estimation for Regression with ARMA Errors. *J. Theoretical Prob*, **10**, 481–497.

Davis, R.A. and Wu, W. (1997). M-estimation for linear regression with infinite variance. *Probability and Mathematical Statistics* **17**, 1–20.

Davis, R.A. and Wu, W. (1997). Bootstrapping *M*-Estimates in Regression and Autoregression with Infinite Variance. *Statistica Sinica*, **7**, 1135–1154.

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Calder, M. and Davis, R.A. (1998). Inference for Linear Processes with Stable Noise. *A practical Guide to Heavy Tails: Statistical Techniques and Applications* (Adler, R., Feldman, R., and Taqqu, M., editors) Birkhäuser, Boston, 159–176.

Davis, R.A. and Mikosch, T. (1998). Gaussian likelihood based inference for non-invertible MA(1) processes with SαS noise. *Stoch. Process. Appl*. **77**, 99–122.

Davis, R.A. and Mikosch, T. (1998). The Sample ACF of Heavy-Tailed Stationary Processes with Applications to ARCH. *Ann. Statist.* **26**, 2049–2080.

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