## **RICHARD H. SPADY**

### **OFFICE ADDRESS:**

Department of Economics Johns Hopkins University Baltimore, MD 07930

#### **DEGREES:**

B.A. (Economics, Philosophy), Haverford College, 1973. Phi Beta Kappa. Ph.D. (Economics), M.I.T., 1978.

## **CURRENT POSITIONS:**

Research Professor of Economics, Johns Hopkins University, since July, 2010. (Visiting Professor Jan 2009-June 2010.) Senior Research Fellow, Nuffield College, Oxford, since October 1999.

## **PREVIOUS PRINCIPAL POSITIONS:**

Professor of Economics, European University Institute, Florence, 2005-2008.
Official Fellow, (Roy Harrod Fellow in the Economics of Business and Public Policy), Nuffield College, University of Oxford, 1992-1999.
Member of Technical Staff, Economics Research Group, AT&T Bell Laboratories (1980-1983), Bell Communications Research (1984-1991).
Assistant Professor of Economics, Swarthmore College, 1978-1980.

### **OTHER POSITIONS:**

International Fellow, IFS and Centre for Microdata Methods and Practice, University College, London and Institute for Fiscal Studies, since 2005; Fellow since 2002. Director of Research, Serrino Trading Company, Chicago, 2003-2004. Adjunct Professor of Economics, Northwestern University, 1992-2004. Chair, Economics Group, Nuffield College, 1996-7. Visiting Scholar, Dept. of Management and Strategy, Kellogg Graduate School of Management, Northwestern University, 1995. Investment Bursar, Nuffield College, 1994-1997. Special Lecturer in Econometrics, University of Pennsylvania, Spring 1992. (Invited series on "Empirical Likelihood and Related Methods in Econometrics.") Visiting Scholar, Department of Economics, Columbia University, 1991-2. Honorary Research Fellow, University of Bristol, 1986.

### **RESEARCH INTERESTS:**

Econometrics; also empirical political science, empirical IO, finance.

### **PUBLICATIONS:**

#### Books

*The American Political Landscape*, with Byron Shafer, Harvard University Press, 2014. *Freight Transport Regulation: Equity, Efficiency and Competition in the Rail and Trucking Industries*, with A. F. Friedlaender, M.I.T. Press, 1981.

*Econometric Estimation of Cost Functions for the Regulated Transportation Industries,* Garland Publishing, Inc., 1979.

## Articles

"Dual Regression," with Sami Stouli, *Biometrika*, **105**, 2018, pp. 1-18 (lead article). "The Catholics and the Others: The Denominational Backdrop to Modern American Politics," with Byron Shafer, *The Forum*, **11**, 2013, pp. 531-559.

"The Performance of Empirical Likelihood and Its Generalizations," with Guido Imbens, in *Identification and Inference for Econometric Models*, Donald Andrews and James Stock (eds.) 2005, Cambridge University Press, pp. 216-244.

"Confidence Intervals in Generalized Method of Moments Models," with G.W. Imbens, *Journal of Econometrics*, **107**, 2002, pp. 87-98.

"Information Theoretic Approaches to Inference in Moment Condition Models," with G. W. Imbens and P. Johnson, *Econometrica*, **66**, 1998, pp. 333-357.

"An Efficient Semiparametric Estimator for Binary Response Models," with R. W. Klein, *Econometrica*, **61**, 1993, pp. 387-421.

"Saddlepoint Approximations for Regression Models," Biometrika, 1991, pp. 879-889.

"Factors Affecting the Output and Quit Propensities of Production Workers," with R. W. Klein and A. M. Weiss, *Review of Economic Studies*, **58**, 1991, pp. 929-954.

"Asymptotic Expansions of the Information Matrix Test Statistic," with A. D. Chesher, *Econometrica*, **59**, 1991, pp. 787-815.

"The Logit Model of Monopolistic Competition: Brand Diversity," with D. Besanko and M. K. Perry, *Journal of Industrial Economics*, **38**, 1990, pp. 397-416.

"Duopoly with Both Ruin and Entry," with R. W. Rosenthal, *Canadian Journal of Economics*, **22**, 1989, pp. 834-51.

"Random Reservation Prices and Bidding Behavior in OCS Drainage Auctions, " with K. Hendricks and R. H. Porter, *Journal of Law and Economics*, **32**, 1989, pp. S83-S106.

"Estimating the Effects of R&D on Bell System Productivity: A Model of Embodied Technical Change," with R. H. Gordon and M. Schankerman, in *Prices, Competition and Equilibrium*, Richard Quandt and Maurice Peston, (eds.) Philip Allan/Barnes and Noble, 1986, pp. 164-190.

"Using Indexed Quadratic Cost Functions to Model Network Technologies," in *Studies in Analytical Transportation Economics*, Andrew Daughety (ed.), Cambridge University Press, 1986, pp. 121-136.

"Regulation and the Structure of Technology in the Trucking Industry," with A. F. Friedlaender and S. J. Wang Chiang, in *Productivity Measurement in Regulated Industries*, T. Cowing and R. Stevenson, (eds.), Academic Press, New York, 1981, pp. 77-106.

"A Derived Demand Function for Freight Transportation," with A. F. Friedlaender, *Review* of Economics and Statistics, **62**, August 1980, pp. 432-441.

"Hedonic Cost Functions for the Regulated Trucking Industry," with A. F. Friedlaender, *Bell Journal of Economics*, 1978, pp. 159-179.

"The Persistence of Cost Overruns," with S. Sheffrin, *Journal of Economic Issues*, **10**, 1976, pp. 404-415.

## Reviews

"Review of *Unequal Democracy*," *The Forum*: Vol. 6 : Iss. 3, Article 11, October 2008; **Available at:** <u>http://www.bepress.com/forum/vol6/iss3/art11</u>

"*Mathematica* - A System for Doing Mathematics by Computer," by Stephen Wolfram, *et. al., Economic Journal*, **100**, 1990, pp. 1018-1026 (Software Review).

## **OTHER RESEARCH IN PROGRESS, WORKING PAPERS, ETC:**

Joint with Sami Stoul, econometric theory, supported by an ESRC grant:

"Simultaneous mean-variance regression," (arXiv: 1804.01631)

"Gaussian transforms modeling and the estimation of distributional regression functions" (arXiv:2011.06416), revise and resubmit at *Econometrica*, revision submitted May 5, 2022.

"The fundamental dimension of the likelihood score process" (in progress).

"Existence and uniqueness of population Gaussian quasi maximum likelihood solutions under heteroskedasticity", first draft June 14, 2022.

In politics:

"The Politics and Principles of the American People", an interactive web site displaying the social determinants of economic and cultural values and their relation to political behavior for user-defined social groups. The site is based on Pew Foundation survey data used in the Shafer and Spady book above and ANES 2016, 2020 for recent elections. Email rspady@jhu.edu for access.

## In finance:

"Conditional day session returns for the SP 500 and similar indexes", an interactive web site applying the Gaussian transform methods developed above with Sami Stouli to the problem of estimating probability densities of daily returns during the standard market session for broad indexes conditioning on recent history and overnight events.

In industrial organization:

"Intangible capital, productivity measurement, and sectoral markup estimation in advanced economies", research sponsored by European Investment Bank, joint with Christoph Weiss (EIB) and Anna Thum-Thysen (DG Ec/Fin, European Commission, Brussels).

Older papers with results not otherwise available:

"Semiparametric methods for the measurement of latent attitudes and the estimation of their behavioural consequences," Center for Microdata Methods and Practice, ('cemmap', University College, London and Institute for Fiscal Studies) Working Paper 26/07, November 2007: <u>http://cemmap.ifs.org.uk/publications.php?publication\_id=4078</u>

"Identification and Estimation of Latent Attitudes and their Behavioral Implications," June 2006 cemmap Working Paper 12/06, 2006:

http://cemmap.ifs.org.uk/publications.php?publication\_id=3652

"The Issue Context of Modern American Politics: Semiparametric Identification of Latent Factors from Discrete Data," cemmap Working Paper 16/02, 2002; with Byron Shafer. http://cemmap.ifs.org.uk/publications.php?publication\_id=2654

# **RECENT INVITED AND CONFERENCE PRESENTATIONS**

# **Invited presentations**

Econometric theory, all representing joint work with Sami Stouli, \* for co-author presentations.

"Fundamental dimension of the likelihood score process", University Carlos III, Madrid, October 13, 2022.

"Gaussian transforms modeling" (and related titles):

Toulouse School of Economics, Sept 13, 2022\*

CREST/Paris School of Economics, May 20, 2022\*

Encounters in Econometric Theory workshop, Nuffield College, Oxford, May 13, 2022\*

University of Manchester, November 2021\*

University Carlos III, Madrid, October 2021\*

Laval University, Quebec, September 2021\*

Oxford-Man Institute of Quantitative Finance, Machine Learning/Artificial Intelligence working group, November 2019

Oxford University, Nuffield Econometrics Seminar, October 2019

Lehigh University, September 2019

London School of Economics, STICERD (Suntory & Toyota International Centres for Economics and Related Disciplines), Econometrics Research Seminar, Feb. 2019 Earlier invited seminars at UCSD, Tinbergen Seminar (Amsterdam), Geneva.

In politics:

"Issues, Attitudes and Voting Behavior: Political Process in the Age of Instrumentarian Media", research seminar at DG Ec-Fin (Directorate General for Economics and Finance), European Commission, Brussels, June 2019 (with followup VIP lunch presentation and technical workshop).

## Contributed papers to conferences, etc:

Mean-variance regression (joint with Sami Stoul): European Meeting of the ES (Econometric Society), Copenhagen, August 2021\* North American Winter Meeting of the ES, San Diego, January 2020\* Africa Meeting of ES (Rabat), July 2019\* Bristol (UK) Econometrics Study Group Conference, July 2019\* Royal Economic Society Conference, Warwick, March 2019\*

Gaussian transforms (joint with Sami Stouli): Bristol Econometrics Study Group Conference, September 2021\* Australasain Meeting of the ES, Melbourne, July 2021\* Asian Meeting of the ES, Miri, June 2021\* African Meeting of the ES, Abidjan, June 2021\* World Congress of the ES, Milan, August 2020\*

## PUBLIC SERVICE/RESEARCH

Member of the Veterans Administration Expert Panel on Causal Models, since March 2022

## **GRADUATE TEACHING, JOHNS HOPKINS UNIVERSITY**

'Empirical likelihood and related methods,' 2009, (as Hinkley Professor).

'Advanced Econometrics in Empirical Economics,' 2010-2022.

### **GRADUATE TEACHING, EUROPEAN UNIVERSITY INSTITUTE:**

'Estimation and inference in econometrics,' for first year doctoral students, 2005-6.

'Semiparametric econometrics,' for first year doctoral students, 2006-7.

'Quantitative methods in economics, politics, and society,' (with Mark Franklin), for all doctoral students in economics and SPS (Social and Political Studies), 2007.

'Empirical likelihood and its generalizations', Working Group, Convenor, 2007-8.

First supervisor of seven students who received the Ph.D.

#### **GRADUATE TEACHING, UNIVERSITY OF OXFORD:**

'Nonparametric econometrics' (and other related titles, varying from year to year), for second year graduate students, 1992-2012.

'Topics in empirical industrial organization,' for second-year graduate students, 1994-1999.

'Econometrics of financial markets,' (with Stan Hurn), for second-year graduate students, 1997.

'Dynamic econometrics,' (time series), for first year graduate students, 1993.

First supervisor of three students who received the D.Phil. and of five students who received the M.Phil.

## **GRADUATE TEACHING, NORTHWESTERN UNIVERSITY:**

'Advanced topics: econometric methods for financial economics,' for graduate students in finance and economics, 2002.

'Applied econometrics: Time series methods,' for graduate students in finance and economics, 2003.

## **OTHER CITED RESEARCH:**

"Higher-order Properties of GEL/EL Estimators," with Susanne Schennach, Working paper, University of Chicago, 2003, available at http://home.uchicago.edu/~smschenn/gelel01.pdf

"Nonparametric Inference by Quasi-Likelihood Methods," Economics Discussion Paper 111, Nuffield College, Oxford, 1996.

"Reliable Inference from Empirical Likelihoods," Economics Discussion Paper 95, Nuffield College, Oxford, 1995, with Anthony Davison and Stephen Corcoran. (Also Working Paper, Department of Statistics, Oxford University.)

"Non-Cooperative Price-Setting by Asymmetric Multiproduct Firms," Bell Communications Research, Technical Memorandum, 1984.