

# YIXIAO SUN

---

## OFFICE ADDRESS

Department of Economics  
University of California, San Diego  
La Jolla, CA 92093-0508

## CONTACT:

- Office phone: (858) 534-4692(UCSD); (203) 432-6684(Yale)
- Web-page: <http://www.econ.ucsd.edu/~yisun>
- E-mail: [yisun@ucsd.edu](mailto:yisun@ucsd.edu)

## PERSONAL DATA:

- Citizenship: P. R. China (US permanent resident)
- Born: 1971

## EMPLOYMENT:

- July 2008-- Associate Professor, Department of Economics,  
University of California, San Diego.
- July 2002--June 2008 Assistant Professor, Department of Economics,  
University of California, San Diego.
- Sept. 2007--May 2008, Visiting Assistant Professor, Department of Economics,  
Yale University.

## EDUCATION:

- 1998--2002: Ph.D., Economics, Yale University,  
Advisors: Donald Andrews (co-chair) and Peter Phillips (co-chair)
- 1998--2000: M. Ph., Economics, Yale University.
- 1993--1996: M.A., Management, Wuhan University, China
- 1989--1993: B.S., Mathematics, Wuhan University, China

## RESEARCH FIELD: Econometric Theory

## GRANTS, HONORS AND AWARDS:

- National Science Foundation Grant. On smoothing parameter choice for interval estimation and hypothesis test in semiparametric models, Principal Investigator, about \$150000, 2008-2011,
- Econometrics Theory Award. In Recognition of Research and Contributions, *multa scripsit*, to the Science of Econometrics, 2007
- Committee on Research Grant (UCSD), 2004, 2005
- Econometric Society World Congress Travel Grant, 2005

- Dissertation Fellowship, Yale University, 2001-2002
- John Perry Miller Fellowship, Yale University, 2000-2001
- Carl Anderson Fellowship, Cowles Foundation for Research In Economics, 2000-2001
- University Fellowship, Yale University, 1998-2000
- Graduate Student Summer Fellowship, Cowles Foundation, 1999, 2000

**PUBLICATIONS:**

1. Phillips, Peter C.B. and **Sun, Yixiao**. “Non-orthogonal Hilbert Projections in Trend Regression,” *Econometric Theory*, Problems and Solutions, Vol. 17 (2001), No. 2.
2. Phillips, Peter C.B. and **Sun, Yixiao**. “Regression with an Evaporating Logarithm Trend,” *Econometric Theory*, Problems and Solutions, Vol. 18 (2002), No. 3.
3. **Sun, Yixiao** and Phillips, Peter C.B. “Nonlinear Log-periodogram Regression Estimation of Long-Range Dependence for Perturbed Fractional Processes,” *Journal of Econometrics*, Vol. 115 (2003), No. 2, pp. 355-389.
4. Andrews, Donald W.K., and **Sun, Yixiao**. “Adaptive Local Polynomial Whittle Estimation of Long-range Dependence,” *Econometrica*, Vol. 72 (2004), No. 2, pp. 569-614.
5. **Sun, Yixiao** and Phillips, Peter C.B. “Understanding the Fisher Equation,” *Journal of Applied Econometrics*, Vol. 19(2004), pp. 869-886.
6. **Sun, Yixiao**. “A Convergent t-statistic in Spurious Regressions,” *Econometric Theory*, Vol. 20 (2004), pp. 943-962.
7. **Sun, Yixiao**. “Estimation of Long Run Average Relationship in Nonstationary Panel Time Series,” *Econometric Theory*, Vol. 20 (2004), pp. 1227-1260.
8. Phillips, Peter C.B., **Sun, Yixiao**, and Jin, Sainan. “Spectral Density Estimation and Robust Hypothesis Testing using Steep Origin Kernels without Truncation,” *International Economic Review*, Vol. 47 (2006), pp. 837-894
9. Phillips, Peter C.B., **Sun, Yixiao**, and Jin, Sainan. “Long Run Variance Estimation and Robust Regression Testing Using Sharp Origin Kernels with No Truncation” *Journal of Statistical Planning and Inference*, Vol. 137 (2007), pp. 985-1023
10. **Sun, Yixiao**. “Spurious Regressions Between Stationary Generalized Long Memory Processes,” *Economics Letters*, Vol. 90 (2006), pp. 446–454
11. Jin, Sainan, Phillips, Peter C.B. and **Sun, Yixiao**. “A New Approach to Robust Inference in Cointegration,” *Economics Letters*, Vol. 91 (2006), pp. 300-3006

12. Guggeberger, Patrik and **Sun, Yixiao**. “Bias-Reduced Log-Periodogram and Whittle Estimation of the Long-Memory Parameter Without Variance Inflation.” *Econometric Theory*, vol 22 (2006), pp. 863–912
13. Carson, Richard and **Sun, Yixiao**. “The Tobit Model with a Non-zero Threshold,” *The Econometrics Journal*, Forthcoming.
14. **Sun, Yixiao**, Phillips, Peter C.B. and Jin, Sainan. “Optimal Bandwidth Selection in Heteroscedasticity-Autocorrelation Robust Testing,” *Econometrica*, Forthcoming.

#### **WORKING PAPERS:**

15. **Sun, Yixiao** and Phillips, Peter C.B. “Optimal Bandwidth Choice for Interval Estimation in GMM Regression,” August 2007
16. **Sun, Yixiao**. “Best Quadratic Unbiased Estimation of Realized Volatility in the Presence of Market Micro-structure Noises,” 2006
17. Cao, Bolong and **Sun, Yixiao**. “Asymptotic Distributions of Impulse Response Functions in Short Panel Vector Autoregressions,” 2006
18. **Sun, Yixiao**. “Estimation and Inference in Panel Structural Models,” 2005
19. **Sun, Yixiao**. “Adaptive Estimation of the Regression Discontinuity Model,” 2005
20. **Sun, Yixiao**, Phillips, Peter C.B. and Jin, Sainan. “Balancing Size and Power in Non Parametric Studentized Testing with Quadratic Power Kernels without Truncation,” 2005
21. **Sun, Yixiao**, Phillips, Peter C.B. and Jin, Sainan. “Improved HAR Inference Using Sharp Kernels without Truncation,” 2004

#### **SELECTED WORK IN PROGRESS:**

- Mesh size selection in sieve estimation for semiparametric models
- Cross-validated smoothing parameter choice in average treatment effect estimation
- Realized volatility forecasting with optimal threshold for jump determination

#### **CONFERENCE PRESENTATIONS:**

“Optimal Bandwidth Choice for Interval Estimation in GMM regression.” Invited Speaker, Cowles foundation conference: Looking into the future: A new generation of econometricians, June 11-12, Yale University.

“Best Quadratic Unbiased Estimators of Realized Volatility.” Invited Speaker, Conference on Volatility and High Frequency Data, April 21-22, 2007, University of Chicago.

“Best Quadratic Unbiased Estimators of Realized Volatility.” Presented at the Far Eastern Econometric Society Meeting, Beijing, 2006

“Asymptotic Distributions of Impulse Response Functions in Short Panel Vector Autoregressions.” Presented at the Far Eastern Econometric Society Meeting, Beijing, 2006

“A Theory of Optimal Heteroscedasticity-Autocorrelation Robust Inference.” Presented at Econometric Society World Congress, London, UK, August 18-24, 2005.

“Consistent HAC Estimation and Robust Regression Testing Using Sharp Origin Kernels with No Truncation.” Presented at Econometric Society Winter Meeting, San Diego, CA, January 3-5, 2004.

Discussant, Econometric Society Winter Meeting, San Diego, CA, January 3-5, 2004.

“Adaptive Local Polynomial Whittle Estimation of Long-range Dependence.” Presented at Econometric Society Summer Meeting, Evanston, IL, June 24-29, 2003. Session Chair.

“Local Polynomial Whittle Estimation of Long-range Dependence.” Presented at the Econometric Society Summer Meeting, College Park, Maryland, June 21-24, 2001.

Invited junior scholar at the National Science Foundation Symposium on Identification and Inference for Econometric Models, U.C. Berkeley, August 2-7, 2001.

#### **TEACHING INTERESTS:**

- Econometrics (all levels)
- Probability and Statistics (all levels)
- Financial Economics (all levels)
- Cross Sectional and Panel Data Econometrics (Graduate)
- Time Series Econometrics (Graduate)
- Computation (Graduate)

#### **TEACHING EXPERIENCES:**

Econ 220C: Panel Data Econometrics and Microeconometrics (Graduate, UCSD);  
 Econ 221: Nonparametric and Semiparametric Econometrics (Graduate, UCSD);  
 Econ 280: Computation (Graduate, UCSD).

Econ 120C: Econometrics (Undergraduate, UCSD);  
 AIP 197: Academic Internship Program (Undergraduate, UCSD);  
 Econ 199: Independent Study (Undergraduate, UCSD);  
 Econ 162: Introduction to Probability and Statistics (Undergraduate, Yale).

**TEACHING AWARDS:**

- Distinguished Teaching Award for Econ 221 (Advanced Field Course in Econometrics), Department of Economics, UCSD, 2007
- 98% approval rating for Econ120C (Undergraduate Econometrics), congratulatory letter from the Senior Vice Chancellor, UCSD, 2007

**GRADUATE STUDENT SUPERVISION:**

Meng Huang, Graduate Student, Thesis Committee Member, in progress  
 Tom Corringham, Graduate Student, Thesis Committee Co-chair, in progress  
 Calhoun, Grayson, Graduate Student, Thesis Committee Member, in progress

Tatsuyoshi Okimoto, Graduate Student, Thesis Committee Member, Ph.D. (2005)  
 Bolong Cao, Graduate Student, Thesis Committee Member, Ph.D. (2006)  
 Cory Koedel, Graduate Student, Thesis Committee Member, Ph.D. (2007)

**SEMINAR PRESENTATIONS:**

Boston University  
 Brown University (multiple times)  
 Cornell University,  
 Harvard/MIT,  
 Michigan State University,  
 New York University,  
 Ohio State University (multiple times),  
 Princeton University,  
 Rice University,  
 SUNY Albany,  
 Syracuse University,  
 Texas A&M University,  
 UC Berkeley,  
 UC Riverside (multiple times),  
 UC Davis (multiple times),  
 UC Los Angeles,  
 UC San Diego (Economics & Mathematics),  
 University of Chicago (Economics & Graduate School of Business)  
 University of Maryland,  
 University of Michigan,

University of Montreal,  
 University of Pennsylvania,  
 University of Rochester,  
 University of Texas at Austin,  
 University of Toronto (multiple times),  
 University of Southern California,  
 Yale University (multiple times).

**PROFESSIONAL AFFILIATIONS:** The Econometric Society, American Statistics Association, Institute of Mathematical Statistics.

**REFeree FOR ECONOMICS JOURNALS:**

Econometrica,  
 Economics Bulletin,  
 Econometric Journal,  
 Econometric Reviews,  
 Econometric Theory,  
 Finance and Stochastics,  
 Journal of Applied Econometrics,  
 Journal of Business and Economic Statistics,  
 Journal of Financial Econometrics,  
 Journal of Econometrics,  
 Journal of Economic Survey,  
 Oxford Bulletin of Economics and Statistics,  
 Quantitative Finance,  
 Macroeconomic Dynamics,  
 Review of Economics and Statistics,  
 Studies in Nonlinear Dynamics and Econometrics.

**REFeree FOR STATISTICAL JOURNALS:**

Annals of Statistics,  
 Bernoulli,  
 Finance and Stochastics,  
 Journal of Applied Statistics,  
 Journal of Multivariate Analysis,  
 Journal of the Japan Statistical Society,  
 Journal of Time Series Analysis,  
 Journal of Statistical Planning and Inference,  
 Metrika.

**REVIEWERS FOR**

National Science Foundation, USA; National Research Council, Canada.