

CURRICULUM VITAE of QIWEI YAO

(Last update: 12 August 2026)

Name : Qiwei Yao

Academic Degrees : BSc in Mathematics, MSc and PhD in Statistics.

Date of Birth : 20 July 1960.

Marital Status : Married, one son.

Current Employment : Professor of Statistics, Department of Statistics, The London School of Economics and Political Science.

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Higher Education

Feb 1985 – Dec 1987: PhD in Statistics, Department of Statistics, Wuhan University, Wuhan, China.

Thesis: Boundary crossing probabilities and their applications in sequential analysis and change-point problems.

Feb 1982 – June 1984: MSc in Statistics, Department of Mathematics, Southeast University, Nanjing, China.

March 1978 – Jan 1982: BSc in Mathematics, Department of Mathematics, Southeast University, Nanjing, China.

Employment History

From Oct 2002: Chair in Statistics, Department of Statistics, The London School of Economics and Political Science, Houghton Street, London WC2A 2AE.

Sept 2006 – Dec 2009: Head, Department of Statistics, The London School of Economics and Political Science, Houghton Street, London WC2A 2AE.

Jan 2000 – Sept 2002: Reader in Statistics, Department of Statistics, The London School of Economics and Political Science, Houghton Street, London WC2A 2AE.

Oct 1995 – Dec 1999: Senior Lecturer in Statistics, Institute of Mathematics and Statistics, University of Kent at Canterbury, Canterbury, Kent CT2 7NF, UK.

Jan 1993 – Sept 1995: Lecturer in Statistics, Institute of Mathematics and Statistics, University of Kent at Canterbury, Canterbury, Kent CT2 7NF, UK.

Aug 1991 – Dec 1992: Research Fellow funded by SERC, Institute of Mathematics and Statistics, University of Kent at Canterbury, Canterbury.

Dec 1990 – July 1991: *Wissenschaftl. Angestellte*, Institute of Applied Mathematics, University of Heidelberg, Germany.

Aug 1989 – Nov 1990: Research Fellow of the Alexander von Humboldt Foundation, Institute of Mathematical Statistics, University of Freiburg, Germany.

Dec 1987 – July 1989: Lecturer, Department of Mathematics, Southeast University, Nanjing, China.

July 1984 – Feb 1985: Assistant Lecturer, Department of Mathematics, Southeast University, Nanjing, China.

Honours

- Fellow of *Institute of Mathematical Statistics*
- Elected member of *International Statistical Institute*
- Fellow of *American Statistical Association*
- ICSA 2015 Outstanding Service Award, *International Chinese Statistical Association*
- Saw Swee Hock Professor of Statistics (2020 & 2024), National University of Singapore.
- ICSA 2024 Distinguished Achievement Award, *International Chinese Statistical Association*
- IMS 2027 Medallion Lecture and Award, *Institute of Mathematical Statistics*.

Research Grants

November 2024 – October 2029: “Statistical Foundations for Detecting Anomalous Structure in Stream Settings” (£4,042,771 in total, LSE share £768,842). EPSRC Programme Grant held by 5 academics from Lancaster, Bristol, Warwick and LSE.

December 2022 – November 2028: “Network Stochastic Processes and Time Series” (£5,162,402 in total, LSE share £534,855). EPSRC Programme Grant held by 9 academics from IC, Bristol, Bath, Oxford, York and LSE.

June 2021 – May 2024: “Statistical network analysis: model selection, differential privacy, and dynamic structures”. (£501,156). EPSRC Research Grant.

January 2019 – December 2020: “Forecasting oil prices based on quantitative methods”. (£148,757). Research grant funded by Andurand Capital Management. (Jointly with Y Chen.)

September 2018 – August 2020: “Analysing and forecasting large electricity consumption data”. (€12,000). Fondation Mathématique Jacques Hadamard, Orsay, France.

Jan 2014 – Dec 2016: “Modelling vast time series: sparsity and segmentation”. (£392,910). EPSRC Research Grant.

June 2010 – May 2013: “High-dimensional time series, common factors, and nonstationarity” (£334,034). EPSRC Research Grant.

- Oct 2005 – Jan 2009: “Dimension reduction for multivariate time series” (£167,573). EPSRC Research Grant. (Jointly with H Tong and J Penzer.)
- April 2003 – March 2006: “Statistical inference for volatility of time series” (£154,142). EPSRC Research Grant. (Jointly with P Hall and J Penzer.)
- Oct 2002 – Sept 2005: “Spatial and spatio-temporal modelling” (£127,823). Leverhulme Trust Research Grant.
- Feb 1999 – Jan 2002: “Nonlinear time series modelling of periodically fluctuating vertebrate population: a spatio-temporal approach” (£113,772). BBSRC/EPSRC Research Grant. (Jointly with H Tong and N C Stenseth.)
- Feb 1997 – Nov 1998: “Applying the principles of nonlinear time series models to high frequency financial market rates” (£91,176). Research grant funded by Royal Bank of Scotland. (Jointly with B Cheng, M G Kenward and H Tong).
- Jan 1997 – Dec 1998: “A dynamical system approach to multi-input-output nonlinear stochastic systems” (£72,741). EPSRC Research Grant. (Jointly with H Tong.)

Current Research Interest: Time series analysis; high-dimensional time series modelling and forecasting; dimension reduction and factor modelling; dynamical network modelling; spatio-temporal modelling; financial econometrics; nonparametric regression.

Publications

Books:

1. Fan, J. and Yao, Q. (2017). *The Elements of Financial Econometrics*. Cambridge University Press, Cambridge.
2. Fan, J. and Yao, Q. (2003). *Nonlinear Time Series: Nonparametric and Parametric Methods*. Springer, New York.

Research Papers:

3. Chang, J., Fang, Q., Kolaczyk, E.D., MacDonald, P.W. and Yao, Q. Autoregressive networks with dependent edges. *Journal of the Royal Statistical Society*, **B**, to appear.
4. Zhu, X. and Yao, Q. Autoregressive Hypergraph. *Journal of Time Series Analysis*, to appear.
5. Qiao, X., Wang, Z., Yao, Q. and Zhang, B. Weight-calibrated estimation for factor models of high-dimensional time series. *Journal of the American Statistical Association*, to appear.
6. Chang, J., Du, Y., He, J. and Yao, Q. Testing independence and conditional independence in high dimensions via coordinatewise Gaussianization. *Journal of the American Statistical Association*, to appear.
7. Chang, J., Du, Y., Huang, G. and Yao, Q. (2026). Identification and estimation for matrix time series CP-factor models. *The Annals of Statistics*, **54**, 1372-1397.
8. Jiang, B., C. Leng, Yan, Y., Yao, Q. and Yu, X. (2025). A two-way heterogeneity model for dynamic networks. *The Annals of Statistics*, **53**, 2617-2641.

9. Chang, J., Fang, Q., Qiao, X. and Yao, Q. (2025). On the Modelling and Prediction of High-Dimensional Functional Time Series. *Journal of the American Statistical Association*, **120**, 2181-2195.
10. Zhang, B., Hao, S. and Yao, Q. (2025). Blind source separation over space: an eigenanalysis approach. *Statistica Sinica*, **35**, 2373-2390.
11. Han, Y., Chen, R., Zhang, C.-H. and Yao, Q. (2024). Simultaneous decorrelation of matrix time series. *Journal of the American Statistical Association*, **199**, 957-969.
12. Zhang, B., Pan, G., Yao, Q. and Zhou, W. (2024). Factor modelling for clustering high-dimensional time series. *Journal of the American Statistical Association*, **199**, 1252-1263.
13. Chang, J., Hu, Q., Kolaczyk, E.D., Yao, Q. and Yi, F. (2024). Edge differentially private estimation in the β -model via jittering and method of moments. *The Annals of Statistics*, **52**, 708-728.
14. Chang, J., Chen, C., Qiao, X. and Yao, Q. (2024). An autocovariance-based learning framework for high-dimensional functional time series. *Journal of Econometrics*, **239** (105385), 1-25.
15. Zhu, P., Ji, Y., Yao, Q. and Wang, Y. (2024). Incentive effects of the R&D expense super deduction policy for high-tech Enterprises: based on an extended counterfactual Model. *Economic Research Journal*, **59**, 132-150.
16. Jiang, B., Li, J. and Yao, Q. (2023). Autoregressive networks. *Journal of Machine Learning Research*, **24** (227), 1-69.
17. Chang, J., He, J., Yang, L. and Yao, Q. (2023). Modelling matrix time series via a tensor CP-decomposition. *Journal of the Royal Statistical Society, B*, **85**, 127-148.
18. Zhou, Y., Shi, C., Li, L. and Yao, Q. (2023). Testing for the Markov property in time series via deep conditional generative learning. *Journal of the Royal Statistical Society, B*, **85**, 1204-1222.
19. Chang, J., Kolaczyk, E.D. and Yao, Q. (2022). Estimation of subgraph density in noisy networks. *Journal of the American Statistical Association*, **117**, 361-374.
20. Chang, J., Cheng, G. and Yao, Q. (2022). Testing for unit roots based on sample autocovariances. *Biometrika*, **109**, 543-550.
21. Xu, X., Chen, Y., Goude, Y. and Yao, Q. (2021). Day-ahead Probabilistic Forecasting for French Half-hourly Electricity Loads and Quantiles for Curve-to-Curve Regression. *Applied Energy*, **301**, 117456.
22. Huang, D., Yao, Q. and Zhang, R. (2021). Krigings over space and time based on latent low-dimensional structures. *Science China Mathematics*, **64**, 823-848.
23. Lin, Y., Tu, Y. and Yao, Q. (2020). Estimation for double-nonlinear cointegration. *Journal of Econometrics*, **216**, 175-191.
24. Tu, Y., Yao, Q. and Zhang, R. (2020). Error-correction factor models. *Statistica Sinica*, **30**, 1463-1484.
25. Li, Z., Lam, C., Yao, J. and Yao, Q. (2019). On testing a high-dimensional white noise. *The Annals of Statistics*, **47**, 3382-3412.

26. Zhang, R., Robinson, P. and Yao, Q. (2019). Identifying cointegration by eigenanalysis. *Journal of the American Statistical Association*, **114**, 916-927.
27. Gao, Z., Ma, Y., Wang, H. and Yao, Q. (2019). Banded spatio-temporal autoregressions. *Journal of Econometrics*, **208**, 211-230.
28. Chang, J., Guo, B. and Yao, Q. (2018). Principal component analysis for second-order stationary vector time series. *The Annals of Statistics*, **46**, 2094-2124.
29. Chang, J., Qiu, Y., Yao, Q. and Zou, T. (2018). Confidence regions for entrices of a large precision matrix. *Journal of Econometrics*, **206**, 57-82.
30. Ke, Y., Li, D. and Yao, Q. (2018). Nonlinear regression estimation using subset-based kernel principal components. *Statistica Sinica*, **28**, 2771-2794.
31. Chang, J., Yao, Q. and Zhou, W. (2017). Testing for high-dimensional white noise using maximum cross correlations. *Biometrika*, **104**, 111-127.
32. Gao, W., Bergsma, W. and Yao, Q. (2017). Estimation for dynamic and static panel probit models with large individual effects. *Journal of Time Series Analysis*, **38**, 266-284.
33. Peng, L. and Yao, Q. (2017). Estimating conditional mean with heavy tails. *Statistics & Probability Letters*, **127**, 14-22.
34. Guo, S., Wang, Y. and Yao, Q. (2016). High dimensional and banded vector autoregressions. *Biometrika*, **103**, 889-903.
35. Dou, B., Parrella, M.L. and Yao, Q. (2016). Generalized Yule-Walker estimation for spatio-temporal models with unknown diagonal coefficients. *Journal of Econometrics*, **194**, 369-382.
36. Li, W., Gao, J., Li, K. and Yao, Q. (2016) Modelling multivariate volatilities via latent common factors. *Journal of Business & Economic Statistics*, **34**, 564-573.
37. Gong, J., Li, Y., Peng, L. and Yao, Q. (2015). Estimation of extreme quantiles for functions of dependent random variables. *Journal of the Royal Statistical Society*, **B**, **77**, 1001-1024.
38. Sgouropoulos, N., Yao, Q. and Yastremiz, C. (2015). Matching a distribution by matching quantiles estimation. *Journal of the American Statistical Association*, **110**, 742-759.
39. Chang, J., Guo, B. and Yao, Q. (2015). High dimensional stochastic regression with latent factors, endogeneity and nonlinearity. *Journal of Econometrics*, **189**, 297-312.
40. Cho, H., Goude, Y., Brossat, X. and Yao, Q. (2015). Modelling and forecasting daily electricity load via curve linear regression. In *Modeling and Stochastic Learning for Forecasting in High Dimension* edited by A. Antoniadis & X. Brossat, Lecture Notes in Statistics, 35-54, Springer.
41. Cho, H., Goude, Y., Brossat, X. and Yao, Q. (2013). Modelling and forecasting daily electricity load curves: a hybrid approach. *Journal of the American Statistical Association*, **108**, 7-21.
42. Wu, B., Yao, Q. and Zhu, S. (2013). Estimation in the presence of many nuisance parameters: composite likelihood and plug-in likelihood. *Stochastic Processes and Their Applications*, **123**, 2876-2897.

43. Lam, C. and Yao, Q. (2012). Factor modelling for high-dimensional time series: inference for the number of factors. *The Annals of Statistics*, **40**, 694-726.
44. Tao, M., Wang, Y., Yao, Q. and Zou, J. (2011). Large volatility matrix inference via combining low-frequency and high-frequency approaches. *Journal of the American Statistical Association*, **106**, 1025-1040.
45. Lam, C., Yao, Q. and Bathia, N. (2011). Estimation of latent factors for high-dimensional time series. *Biometrika*, **98**, 901-918.
46. Bathia, N., Yao, Q. and Ziegelmann, F. (2010). Identifying the finite dimensionality of curve time series. *The Annals of Statistics*, **38**, 3352-3386.
47. Liu, J.M., Chen, R. and Yao, Q. (2010). Nonparametric transfer function models. *Journal of Econometrics*, **157**, 151-164.
48. Pan, J., Polonik, W., and Yao, Q. (2010). Estimating factor models for multivariate volatilities: An innovation expansion method. In *Proceedings of COMPSTAT'2010*, V. Lechevalier, G. Saporta (edit.), 305-314. Physica-Verlag HD.
49. Lu, Z., Steinskog, D.J., Tjøstheim, D. and Yao, Q. (2009). Adaptively varying coefficient spatio-temporal models. *Journal of the Royal Statistical Society, B*, **71**, 859-880.
50. Penzer, J., Wang, M. and Yao, Q. (2009). Approximating volatilities by asymmetric power GARCH functions. *Australian & New Zealand Journal of Statistics*, **51**, 201-225.
51. Fan, J., Peng, L., Yao, Q. and Zhang, W. (2009). Approximating conditional density functions using dimension reduction. *Acta Mathematica Applicatae Sinica*, **25**, 445-456.
52. Li, Q., Pan, J. and Yao, Q. (2009). On determination of cointegration ranks. *Statistics and Its Interface*, **2**, 45-56.
53. Pan, J. and Yao, Q. (2008). Modelling multiple time series via common factors. *Biometrika*, **95**, 365-379.
54. Fan, J., Wang, M. and Yao, Q. (2008). Modelling multivariate volatilities via conditionally uncorrelated components. *Journal of the Royal Statistical Society, B*, **70**, 679-702.
55. Polonik, W. and Yao, Q. (2008). Testing for multivariate volatility functions using minimum volume sets and inverse regression. *Journal of Econometrics*, **147**, 151-162.
56. Huang, D., Wang, H. and Yao, Q. (2008). Estimating GARCH models: when to use what? *Econometrics Journal*, **11**, 27-38.
57. Lu, Z., Tjøstheim, D. and Yao, Q. (2008). Spatial smoothing, nugget effect and infill asymptotics. *Statistics and Probability Letters*, **18**, 3145-3151.
58. Kreiss, J.P., Nuemann, M. and Yao, Q. (2008). Bootstrap tests for simple structures in nonparametric time series regression. *Statistics and Its Interface*, **1**, 367-380.
59. Fan, J., Hall, P. and Yao, Q. (2007). To how many simultaneous hypothesis tests can normal, student's t or bootstrap calibration be applied? *Journal of the American Statistical Association*, **102**, 1282-1288.
60. Lu, Z., Lundervold, A., Tjøstheim, D. and Yao, Q. (2007). Exploring spatial nonlinearity using additive approximation. *Bernoulli*, **13**, 447-472.

61. Pan, J., Wang, H. and Yao, Q. (2007). Weighted least absolute deviations estimation for ARMA models with infinite variance. *Econometric Theory*, **23**, 852-879.
62. Lu, Z., Tjøstheim, D. and Yao, Q. (2007). Adaptive varying-coefficient linear models for stochastic processes: asymptotic theory. *Statistica Sinica*, **17**, 177-197.
63. Yao, Q. and Brockwell, J.P. (2006). Gaussian maximum likelihood estimation for ARMA models II: spatial processes. *Bernoulli*, **12**, 403-429.
64. Yao, Q. and Brockwell, J.P. (2006). Gaussian maximum likelihood estimation for ARMA models I: time series. *Journal of Time Series Analysis*, **27**, 857-875.
65. Hall, P. and Yao, Q. (2005). Approximating conditional distribution functions using dimension reduction. *The Annals of Statistics*, **33**, 1404-1421.
66. Wang, M. and Yao, Q. (2005). Modelling multivariate volatilities: an ad hoc approach. In *Contemporary Multivariate Analysis and Experimental Designs – In Celebration of Professor Kai-Tai Fang's 65th Birthday* J. Fan & G. Li (edit.), 87-97. World Scientific, Singapore.
67. Peng, L. and Yao, Q. (2004). Nonparametric regression under infinite variance dependent errors. *Annals of the Institute of Statistical Mathematics*, **56**, 73-86.
68. Wolff, R.C., Yao, Q. and Tong H. (2004). Statistical tests for Lyapunov exponents of deterministic systems. *Studies in Nonlinear Dynamics and Econometrics*, **8**, 2, Article 10 (<http://www.bepress.com/snnde/vol8/iss2/art10>) .
69. Hall, P. and Yao, Q. (2003). Inference in ARCH and GARCH models with heavy tailed errors. *Econometrica*, **71**, 285-317.
70. Peng, L. and Yao, Q. (2003). Least absolute deviations estimation for ARCH and GARCH models. *Biometrika*, **90**, 967-975.
71. Zhang, W., Yao, Q., Tong, H. and Stenseth, N.C. (2003). Smoothing for spatio-temporal models and its application in modelling muskrat-mink interaction. *Biometrics*, **59**, 813-821.
72. Hall, P. and Yao, Q. (2003). Inference in components of variance models with low replication. *The Annals of Statistics*, **31**, 414-441.
73. Hall, P. and Yao, Q. (2003). Data tilting for time series. *Journal of the Royal Statistical Society*, **B**, **65**, 425-442.
74. Fan, J., Yao, Q. and Cai, Z. (2003). Adaptive varying-coefficient linear models. *Journal of the Royal Statistical Society*, **B**, **65**, 57-80.
75. Yao, Q. (2003). Exponential inequalities for spatial processes and uniform convergence rates for density estimation. In *Development of Modern Statistics and Related Topics — In Celebration of Professor Yaoting Zhang's 70th Birthday*, J. Huang and H. Zhang (edit.), 118-128. World Scientific, Singapore.
76. Polonik, W. and Yao, Q. (2002). Set-Indexed Conditional Empirical and Quantile Processes Based on Dependent Data. *Journal of Multivariate Analysis*, **80**, 234-255.
77. Hall, P., Peng, L. and Yao, Q. (2002). Prediction and nonparametric estimation for time series with heavy tails. *Journal of Time Series Analysis*, **23**, 313-331.

78. Hyndman, R.J. and Yao, Q. (2002). Nonparametric estimation and symmetry tests for conditional density functions. *Journal of Nonparametric Statistics*, **14**, 259-278.
79. Hall, P., Peng, L. and Yao, Q. (2002). Moving-maximum models for extrema of time series. *Journal of Statistical Planning and Inference*, **103**, 51-63.
80. Cai, Z., Yao, Q. and Zhang, W. (2001). Smoothing for discrete-valued time series. *Journal of the Royal Statistical Society*, **B**, **63**, 357-375.
81. Yao, Q., Zhang, W. and Tong, H. (2001) Bootstrap estimation of actual significance levels for tests based on estimated nuisance parameters. *Statistics and Computing*, **11**, 367-371.
82. Finkenstädt, B., Yao, Q. and Tong, H. (2001). A conditional density approach to the order determination of time series. *Statistics and Computing*, **11**, 229-240.
83. Polonik, W. and Yao, Q. (2000). Conditional minimum volume predictive regions for stochastic processes. *Journal of the American Statistical Association*, **95**, 509-519.
84. Cai, Z., Fan, J. and Yao, Q. (2000). Functional-coefficient regression models for nonlinear time series. *Journal of the American Statistical Association*, **95**, 941-956.
85. Yao, Q., Tong, H. Finkenstädt, B. and Stenseth, N.C. (2000). Common structure in panels of short ecological time series. *Proceeding of the Royal Society (London)*, **B**, **267**, 2457-2467.
86. Yao, Q. and Tong, H. (2000). Nonparametric estimation of ratios of noise to signal in stochastic regressions. *Statistica Sinica*, **10**, 751-770.
87. Hall, P., Wolff, R.C.L. and Yao, Q. (1999). Methods for estimating a conditional distribution function. *Journal of the American Statistical Association*, **94**, 154-163.
88. Yao, Q. and Morgan, B.J.T. (1999). Empirical transform estimation for indexed stochastic models. *Journal of the Royal Statistical Society*, **B**, **61**, 127-141.
89. Fan, J. and Yao, Q. (1998). Efficient estimation of conditional variance functions in stochastic regression. *Biometrika*, **85**, 645-660.
90. Hjellvik, V., Yao, Q., and Tjøstheim, D. (1998). Linearity testing using local polynomial approximation. *Journal of Statistical Planning and Inference*, **68**, 295-321.
91. Yao, Q. and Tong, H. (1998). Cross-validatory bandwidth selections for regression estimation based on dependent data. *Journal of Statistical Planning and Inference*, **68**, 387-415.
92. Yao, Q. and Tong, H. (1998). A bootstrap detection for operational determinism. *Physica*, **D**, **115**, 49-55.
93. Fan, J, Yao, Q. and Tong, H. (1996). Estimation of conditional densities and sensitivity measures in nonlinear dynamical systems. *Biometrika*, **83**, 189-206.
94. Yao, Q. (1996). Conditional boundary crossing probabilities and two-stage tests for a change-point. *Scandinavian Journal of Statistics*, **23**, 511-525.
95. Yao, Q. and Tong, H. (1996). Asymmetric least squares regression estimation: a nonparametric approach. *Journal of Nonparametric Statistics*, **6**, 273-292.
96. Yao, Q. and Tong, H. (1994). Quantifying the inference of initial values on nonlinear prediction. *Journal of the Royal Statistical Society*, **B**, **56**, 701-725.

97. Yao, Q. and Tong, H. (1994). On prediction and chaos in stochastic systems. *Philosophical Transaction of the Royal Society (London)* **A**, **348**, 357-369. (An extended version is published in *Chaos and Forecasting* (1995) ed. by H Tong, World Scientific, Singapore, 57-86.)
98. Yao, Q. and Tong, H. (1994). On subset selection in non-parametric stochastic regression. *Statistica Sinica*, **4**, 51-70.
99. Yao, Q. (1993). Tests for change-points with epidemic alternatives. *Biometrika*, **80**, 179-191.
100. Yao, Q. (1993). Asymptotically optimal detection of a change in a linear model. *Sequential Analysis*, **12**, 201-210.
101. Yao, Q. (1993). Boundary crossing probabilities of some random fields related to likelihood ratio test for epidemic alternatives. *Journal of Applied Probability*, **30**, 52-65.
102. Sun, Y. and Yao, Q. (1993). Pre-test estimate of the parameters in seemingly unrelated regression system. *Chinese Journal Applied Probability & Statistics*, **9**, 1-10.
103. Zhang, Y. and Yao, Q. (1991). Some maximal information and generalized maximal entropy priors. *Chinese Journal Applied Probability & Statistics*, **7**, 192-200.
104. Yao, Q. (1989). Large deviations for boundary crossing probabilities of some random fields. *Journal Mathematical Research & Exposition*, **9**, 181-192.
105. Yao, Q. (1987). The MVUE and the MINQE(I, U) of variance components. *Journal of Nanjing Institute of Technology*, **17**, 111-122.

Reviews and Discussions:

106. Chang, J., Kolaczyk, E.D. and Yao, Q. (2020). Discussion of ‘Network cross-validation by edge sampling’. *Biometrika*, **107**, 277-280.
107. Yao, Q. (2011). Discussion of “Feature matching in time series modeling” by Y. Xia and H. Tong. *Statistical Science*, **26**, 57-58.
108. Yao, Q. (2009). Chaos perspective of nonlinear time series: a selective review. In *Exploration of a Nonlinear World: An Appreciation of Howell Tong’s Contributions to Statistics* ed. by K.S.Chan, 149-154. World Scientific, Singapore.
109. Yao, Q. (2008). A discussion on ‘Sure independence screening for ultrahigh dimensional feature space’ by J Fan and J Lv. *Journal of the Royal Statistical Society*, **B**, **70**, 887-888.
110. Yao, Q. (2002). A discussion on ‘An adaptive estimation of dimension reduction space’ by Y Xia, H Tong, WK Li and L Zhu. *Journal of the Royal Statistical Society*, **B**, **64**, 293.
111. Yao, Q. (2001). Book review on “Asymptotic Theory of Statistical Inference for Time Series” by Taniguchi M. & Kakizawa Y. *Biometrics*, **57**, 656-657.
112. Fan, J. and Yao, Q. (1999). A discussion on ‘Fractal analysis of surface roughness by using spatial data’ by S Davies and P Hall. *Journal of the Royal Statistical Society*, **B**, **61**, 33.
113. Yao, Q. (1997). A discussion on ‘Predicting multivariate responses in multiple linear regression’ by L. Breiman and J.H. Friedman. *Journal of the Royal Statistical Society*, **B**, **59**, 44.

114. Yao, Q. and Tong, H. (1995). On initial-condition sensitivity and prediction in nonlinear stochastic systems. *Bulletin of The International Statistical Institute*, **IP 10.3**, 395-412.

Preprints:

115. Wang, Y., Goude, Y. and Yao, Q. Hedging memory horizons for non-stationary prediction via online aggregation.
116. Dou, B., Gavioli-Akilagun, S., Tiwari, S. and Yao, Q. Pairs Trading: A Change Point Perspective.
117. Li, D., Yan, Y. and Yao, Q. Factor Models of Matrix-Valued Time Series: Nonstationarity and Cointegration.
118. Dou, B., He, J., Tiwari, S. and Yao, Q. Spatio-Temporal Autoregressions for High Dimensional Matrix-Valued Time Series.
119. Jiang, B., Yao, Q. and Yu, X. Dynamic Networks with Node Heterogeneity and Homophily.
120. Chang, J., Huang, G., Yao, Q. and Yu, L. CP-factorization for high dimensional tensor time series and double projection iterations.
121. Chang, J., He, J., Lin, C. and Yao, Q. HDTSA: An R package for high-dimensional time series analysis.
122. Chen, E.Y., Yun, X., Chen, R. and Yao, Q. Modeling multivariate spatial-Temporal data with latent low-dimensional dynamics.
123. Dong, H. and Yao, Q. Estimating spillovers under factor-induced constraints.
124. An, H.-Z., Huang, D., Yao, Q. and Zhang, C.-H. Stepwise searching for feature variables in high-dimensional linear regression.