RONG CHEN

Department of Statistics
School of Arts and Sciences
Rutgers, The State University of New Jersey
Hill Center, Busch Campus
110 Frelinghuysen Road
Piscataway, NJ 08854-8019

Tel: (732) 445-5199
Fax: (732) 445-3428
email: rongchen@stat.rutgers.edu
web: stat.rutgers.edu/˜rongchen

Education:

- 1990 Ph.D., Statistics, Carnegie Mellon University, Pittsburgh, PA.
- 1987 M.S., Statistics, Carnegie Mellon University, Pittsburgh, PA.
- 1985 B.S., Mathematics, Peking University, Beijing, People's Republic of China.

Experience:

- 2007 - Professor, Department of Statistics, Rutgers University
- 2005 - 2007 Program Director, Division of Mathematical Sciences, National Science Foundation
- 1999 - 2007 Professor, Department of Information and Decision Sciences and Department of Bioengineering, The University of Illinois at Chicago.
- 2002 - 2005 Professor and Head, Department of Business Statistics and Econometrics, Peking University, China
- 1996 - 1999 Associate Professor, Department of Statistics, Texas A&M University.
- 1990 - 1996 Assistant Professor, Department of Statistics, Texas A&M University.

Major Research Interests:

- Nonlinear and Multivariate Time Series Analysis.
- Monte Carlo Methods, Statistical Computing and Bayesian Analysis.
- Statistical Applications in Economics and Business.
- Statistical Applications in Bioinformatics

Funding:

- 'Collaborartive Research: Monte Carlo Study of Pseudoknotted RNA Molecules: Motifs, Structure and Folding.' NSF grant DMS-0800183. 2008-2012. Principal Investigator.
- 'Constrained Sequential Monte Carlo and Its Applications in Structural Bioinformatics: From Surface Patterns and Spatial Motif to Protein Function and Stability.' NIH grant R01 Gm068958. 2003-2007. Principal Investigator.
- 'Collaborative Research: Advanced Sequential Monte Carlo Methods and Applications' NSF grant DMS-0244541 (Focused Research Group Grant) 2003 - 2006. Principal Investigator.
- 'Collaborative Research: Sequential Monte Carlo Methods and Their Applications' NSF grant DMS-0073601 (Focused Research Group Grant) 2000 - 2003. Principal Investigator.

- ‘Adaptive Bayesian Receivers in Fading Channels: A Sequential Monte Carlo Filtering Design Paradigm’, NSF grant CCR-9980599. 2000-2003, Co-Principal Investigator.
- ‘Monte Carlo Filters for Nonlinear and Non-Gaussian Dynamic Systems,’ NSF grant DMS-9982846. 1999-2002, Principal Investigator
- ‘Nonparametric Modeling and Prediction for Time Series Analysis’, NSF grant DMS-9626113, 1996-1999, Principal Investigator.
- ‘Nonlinear Time Series Analysis’, NSF grant DMS-9301193, 1993-1996, Principal Investigator.
- ‘Missing observation prediction for tidal analysis’, Texas General Water Office. 1996, Co-Investigator.
- ‘Protocols and Procedures for Environmental Impact, Mitigation and Recovery Data’, Texas General Land Office. 1995, Co-Investigator.
- ‘Spatial-temporal modeling and prediction of surface ozone level in Harris County, TX,’ Texas Natural Resource Conservation Commission, 1994, Co-Investigator.

Awards:

- Elected Fellow of Institute of Mathematical Statistics (2006)
- Elected Fellow of American Statistical Association (2002)
- 2001 College of Business Administration Alumni Award for Distinguished Research, University of Illinois at Chicago

Professional Societies:

- Institute of Mathematical Statistics
- American Statistical Association
- IEEE Society

Professional Services:

- Treasurer, Institute of Mathematical Statistics, 2007-
- Associate Editor, *Annals of Statistics*, 2007-
- Associate Editor, *Statistica Sinica.* 1998 - 2006
- Associate Editor, *Computational Statistics.* 1997 - present
- Associate Editor, *Journal of American Statistical Association.* 2001 - 2005
- Associate Editor, *Journal of Business & Economic Statistics.* 1997 - 2003
- Council member, International Society on Business and Industrial Statistics, 2005-2007.
- Board member, International Chinese Statistical Association, 2002-2004.
- Chair: communication committee, International Chinese Statistical Association. 2002.
- Chair: organizing committee for 2004 International Symposium on Business Statistics, Beijing, China.
- Co-Chair: organizing committee for 2001 ICSA Applied Statistics Symposium.
- Member, Program Committee, ’Making Statistics More Effective in Schools of Business’ annual conference.
- Member of Advisory Board of XploRe, an advanced statistical environment

- Member, ASA Scientific Freedom and Human Rights committee (1995-1997)
- External examiner, Department of Statistics, Chinese University of Hong Kong. 2003-2005.
- Panel Reviewer for NSF (four times)
- Proposal Reviewer for: National Science Foundation, National Security Agency,
- Refereed more than 150 papers for more than 20 different journals.
- Book Review for *Journal of American Statistical Association, International Journal of Forecasting*

University Services:

- Member, Department Faculty Search Committee
- Member, Department Space Committee

US Patent:

- US Patent 6,725,025: 'Interference Cancellation Among Wireless Units Using Gibbs Sampling'

Post Doc Fellow and Ph.D Students Supervised:

- Ming Lin, current post doc fellow under supervision
- Jun M. Liu, Assistant Professor, Georgia Southern University
- Jinfeng Zhang, Assistant Professor, Florida State University
- Dong Guo, financial analyst
- Chen Chen, financial analyst
- Shenlin Wu, financial analyst
- Airong Cai, marketing analyst
- Yongchang Feng, financial analyst

Refereed Journal Publications:

[1] Chen, R. and Tsay, R.S. (1991) 'On the ergodicity of TAR(1) processes', *The Annals of Applied Probability*, **1**, 613-634.

[2] Chen, R. and Tsay, R.S. (1993) 'Functional coefficient autoregressive models', *Journal of American Statistical Association*, **88**, 298-308.

[3] Chen, R. and Tsay, R.S. (1993) 'Nonlinear additive ARX models', *Journal of American Statistical Association*, **88**, 955-967.

[4] Liu, J.S. and Chen, R. (1995) 'Blind deconvolution via sequential imputation', *Journal of American Statistical Association*, **90**, 567-576.

[5] Chen, R., Liu, J.S. and Tsay, R.S. (1995) 'Additivity tests for nonlinear autoregressive models', *Biometrika*, **82**, 369-383.

[6] Chen, R. (1995) 'Threshold variable selection of open-loop threshold AR models', *Journal of Time Series Analysis*, **16**, 461-481

[7] Chen, R. and Li, T. (1995) 'Blind restoration of linearly degraded discrete signals by Gibbs sampler', *IEEE Transactions on Signal Processing*, **43**, 2410-2413

[8] Chen, R. (1996) ‘A nonparametric multi-step prediction estimator in Markovian structures’, *Statistica Sinica*, **6**, 603-615

[9] Chen, R. and Liu, J.S. (1996) ‘Predictive updating methods with applications to Bayesian classification’, *Journal of the Royal Statistical Society, Series B*, **58**, 397-415

[10] Chen, R. and Tsay, R.S. (1996) ‘Nonlinear transfer functions’, *Journal of Nonparametric Statistics*, **6**, 193-204.

[11] Cheng, Q., Chen, R. and Li, T. (1996) ‘Simultaneous wavelet estimation and deconvolution of reflection Seismic signals via Gibbs sampler’, *IEEE Transactions on Geoscience and Remote Sensing*, **34**, 377-384

[12] Chen, R. (1996) ‘Incorporating extra information in nonparametric smoothing’, *Journal of Multivariate Analysis*, **58**, 133-150

[13] Carroll, R.J., Chen, R., Li, T-H, Newton, H.J., Schmiediche, H. and Wang, N. (1997) ‘Trends in ozone exposure in Harris County, Texas’, *Journal of American Statistical Association*, (discussion paper), **92**, 392-415

[14] Härdle, W., Chen, R. and Luetkepohl, H. (1997). ‘A review of nonparametric time series analysis’, *International Statistical Review*, **65**, 49-72

[15] Linton, O. Chen, R. Wang, N. and Härdle, W. (1997). ‘An analysis of transformation for additive nonparametric regression’, *Journal of American Statistical Association*, **92**, 1512-1521

[16] Liu, J.S. and Chen, R. (1998) ‘Sequential Monte Carlo methods for dynamic systems’, *Journal of American Statistical Association*, **93**, 1032-1043

[17] Liu, J.S. Chen, R. and Wong, W.H. (1998) ‘Rejection control and importance sampling’, *Journal of American Statistical Association*, **93**, 1022-1031

[18] Chen, R. and Fomby, T. (1999) ‘Forecasting with stable seasonal pattern models with an application of Hawaiian tourist data’, *Journal of Business & Economic Statistics*, **17**, 497-504

[19] Speed, F.M., Smith, W.B., Chen, R., and Speed, F.M. Jr (1999), ‘Analysis of tidal data and datums: Accessible examples of harmonic modeling with autocorrelation and imputation’, *Communications in Statistics, Part A – Theory and Methods*, **28**, 2947-2965

[20] Chen, R. and Liu, J.S. (2000) ‘Mixture Kalman Filters’, *Journal of the Royal Statistical Society, Series B*, **62**, 493-508

[21] Chen, R., Wang, X. and Liu, J.S. (2000) ’Adaptive Joint Detection and Decoding in Flat-Fading Channels via Mixture Kalman Filtering’. *IEEE trans. information theory*, **46**, 2079-2094

[22] Wang, X. and R. Chen. (2000) ’Adaptive MAP multiuser detection for synchronous CDMA with Gaussian and non-Gaussian noise’, *IEEE trans. signal processing*, **48**, 2013-2028

[23] Chen, R. and Liu, L. (2001) ’Functional coefficient autoregressive models: estimation and tests of hypotheses’, *J. Time Series Analysis*, **22**, 151-174

[24] Wang, X. and R. Chen. (2001) ’Blind Turbo equalization in Gaussian and impulsive noises. *IEEE trans. Vehicular Technology*, **50**, 1092-1105

[25] Liu, L-M, Bhattacharyya, S., Sclove, S.L., Chen, R. and Lattyak, W.J. (2001) ’Data mining on time series: an illustration using fast-food restaurant franchise data’, *Computational Statistics and Data Analysis*, **37**, 455-476

[26] Wang, X., Chen, R. and Liu, J.S. (2002) ’Monte Carlo Bayesian signal processing for wireless communication’, *IEEE trans. VLSI Signal Process*, **30**, 89-105

[27] Chen, R., Liu, J.S., and Wang, X. (2002) 'Convergence Properties of the Gibbs Sampler in Some Digital Communications Problems', *IEEE trans. Signal Process*, **50**, 255-270

[28] Wang, X., Chen, R. and Guo, D. (2002) 'Delayed Pilot Sampling for Mixture Kalman Filter with Application in Fading Channels', *IEEE trans. Signal Process*, **50**, 241-254

[29] Chen, R. and J.S. Liu. (2002) Discussion of ' Spatial-Temporal Nonlinear Filtering Based on Hierarchical Statistical Models' by M. E. Irwin, N. Cressie, and G. Johannesson. *Test*, **11**, 282-284.

[30] Liang, J, Chen, R. and Zhang, J. (2002) 'On statistical geometry of packing defects of lattice chain polymer', *Journal of Chemical Physics*, **117**, 3511-3521

[31] Guo, D. Wang, X. and Chen, R. (2003) 'Nonparametric Adaptive Detection in Fading Channels Based on Sequential Monte Carlo and Bayesian Model Averaging', *Annuals of Institute of Statistical Mathematics*, **55**, 423-436.

[32] Zhang, J., R. Chen, C. Tang and J. Liang (2003) 'Origin of scaling behavior of protein packing density: A sequential Monte Carlo study of compact long chain polymer', *Journal of Chemical Physics*, **118**, 6102-6109

[33] Chen, R., Yang, L. and Hafner, C. (2004) 'Nonparametric multi-step prediction in time series', *Journal of the Royal Statistical Society, Series B.* **66**, 669-686.

[34] Guo, D., Wang, X., and Chen, R.(2004) 'Wavelet-based Sequential Monte Carlo Blind Receivers in Fading Channels with Unknown Channel Statistics', *IEEE Transactions on Signal Processing.* **52**, 227-239

[35] Zhang, J., Chen, Y., Chen, R., and Liang, J. (2004) 'Importance of chirality and reduced flexibility of protein side chains: A study with square and tetrahedral lattice models', *Journal of Chemical Physics*, **121**, 592-603

[36] Hjellvik, V., Chen, R., and Tjostheim, D. (2004) 'Nonparametric estimation and testing in panels of intercorrelated time series', *Journal of Time Series Analysis* **25**, 831-872

[37] Guo, D., Wang, X. and Chen, R. (2004) 'Multilevel Mixture Kalman Filter', *EURASIP Journal on Applied Signal Processing, Special issue on Particle Filtering*, **15**, 2255-2266.

[38] Guo, D., Wang, X. and Chen, R. (2005) 'New Sequential Monte Carlo Methods for Nonlinear Dynamic Systems', *Statistics and Computing.* **15**, 135-147

[39] Lin, M., Zhang, J., Cheng, Q. and Chen, R. (2005) 'Independent particle filters', *Journal of American Statistical Association*, **100**, 1412-1421.

[40] Liu, J.M, Liu, L-M and Chen, R. (2006) 'Modeling hourly electricity loads using a semiparametric time series approach', *Journal of Forecasting*, **25**, 537-559.

[41] Zhang, J., Chen, R. and Liang, J. (2006) 'Empirical potential function for simplified protein models: combining contact and local sequence structure descriptors', *PROTEINS: Structure, Function, and Bioinformatics*, **63**, 949-960.

[42] Zhang, J., Lin, M., Chen, R., Liang, J. and Jun S. Liu (2007) Monte Carlo sampling of Near-Native structures of proteins with applications', *PROTEINS: Structure, Function, and Bioinformatics*, **66**, 61-68.

[43] Chen, C.T., Chen, R. and Basset, G. (2007) 'Properties of the cross-sectional distribution of daily equity returns', *Finance Letters*, in press.

[44] Wu, S, and Chen, R. (2007) ‘Threshold variable selection and threshold variable driven switching autoregressive models’, *Statistica Sinica*, **17**, 241-264.

[45] Zhang, J.L., Lin, M, Liu, J.S. and Chen. R. (2007) ‘Lookahead and piloting strategies for variable selection’, *Statistica Sinica*, **17**, 985-1005.

[46] Chen, C.T., Chen, R. and Bassett, G.W. (2007) ’Fundamental Indexation via Smoothed Cap Weights’, *J. Finance and Banking*, **31**, 3486-3502.

[47] Liu, J.M., Q. Yao and Chen, R. (2008) ‘Nonparametric function transfer models’, *J. Econometrics*, in press

[48] Lin, M., Chen, R. and Liang, J. (2008) ’Statistical geometry of lattice chain polymers with voids of defined shapes: Sampling with strong constraints’, *J. Chemical Physics*, in press.

[49] Cai, A.M., Tsay, R.S. and Chen, R. (2008) ‘Variable selection in linear regression with many predictors’, *J. Computational and Graphical Statistics*, in press

[50] Zhang, J., Lin, M., Chen, R., Wang, W. and Liang, J. (2008) ’Discrete State Model and Accurate Estimation of Loop Entropy of RNA Secondary Structures’, *J. Chemical Physics*, in press.

[51] Feng, X., Chen, R. and Bassett, G.W. ’Quantile Momentum’, *Statistics and Its Interface*, in press

[52] Lin, M., Lu, H., Chen, R. and Liang, J. ’Generating properly weighted ensemble of conformations of proteins from sparse or indirect distance constraints’, *J. Chemical Physics*, in press.

Articles Submitted for Publication:

[53] Cai, A., R. Chen and T. Fomby, ’Prediction-Based Adaptive Compositional Model for Seasonal Time Series Analysis’, submitted.

[54] Chen, R., Lin, M. and Guo, R. ‘Self-Selection in Decision to Withdraw IPOs’, submitted.

[55] Cai,Z. and Chen, R. ’Nonparametric Seasonal Time Series Models’, to be submitted.

[56] Liang, H. and Chen, R. ‘On determination of linear components in nonparametric additive regression models’, to be submitted.

[57] Lin, M., Liu, J.S. and Chen. R. ’Delay strategies in sequential Monte Carlo’, to be submitted.

[58] Feng, X., Chen, R. and Bassett, G.W. ’Mean-variance efficiency of fundamental index portfolio’, to be submitted.

Proceedings and Book Chapters:

[59] Chen, R. and Hafner, C. (1994) ‘Nonlinear time series analysis’, in *XploRe: an interactive statistical computing environment*, Ed. W. Härdle, S. Klinke and B.A. Turlach, Springer: Berlin.

[60] Chen, R. and Härdle, W. (1995) ‘Nonparametric time series analysis, a selective review with examples’, invited paper at 50th session of ISI, August, 1995, Beijing, China. *Bulletin of the International Statistical Institute.*

[61] Chen, R., Härdle, W., Linton, O.B., and Severance-Lossin, E. (1996) ‘Nonparametric estimation of additive separable regression models’, in *Statistical Theory and Computational Aspects of Smoothing*, Ed. W. Härdle, M.G. Schimek.

[62] R. Chen, X. Wang, and J.S. Liu. "Adaptive Detection in Fading Channels via Monte Carlo Filtering". *Proceedings of the 33nd Annual Asilomar Conference on Signals, Systems and Computers*, pp.1149-1153, Pacific Grove, California, October 24-27, 1999.

[63] X. Wang and R. Chen. "Blind MAP Equalization in Non-Gaussian Noise". *Proceedings of the 32nd Conference on Information Science and Systems (CISS'99)*, pp.379-384, The Johns Hopkins University, Baltimore, Maryland, March 17-19, 1999. (Invited)

[64] Liu, J.S., Chen, R. and Logvinenko, T. (2000) 'A theoretical framework for sequential importance sampling and resampling', in *Sequential Monte Carlo Methods in Practice.* Editors: A. Doucet, J.F.G. de Freitas and N. Gordon. Cambridge University Press

[65] X. Wang, R. Chen, and J.S. Liu. "Blind Adaptive Multiuser Detection in MIMO Systems via Sequential Monte Carlo". *Proceedings of the 34th Conference on Information Science and Systems (CISS'00)*, Princeton University, Princeton, New Jersey, March 15-17, 2000. (Invited)

[66] X. Wang and R. Chen. "Adaptive Bayesian Multiuser Detection". *Proceedings of the 2000 IEEE International Symposium on Information Theory (ISIT'00)*, Sorrento, Italy, June 25-30, 2000.

[67] R. Chen, X. Wang, and Jun S. Liu. "Adaptive Joint Detection and Decoding in Flat-Fading Channels via Mixture Kalman Filtering". *Proceedings of the 2000 IEEE International Symposium on Information Theory (ISIT'00)*, Sorrento, Italy, June 25-30, 2000.

[68] X. Wang, R. Chen, and J.S. Liu. "Sequential Monte Carlo Filters and Their Applications." *Proceeds of the 2000 Workshop on Statistical Signal and Array Processing (SSAP'00)*, Pocono Manor, PA, August 14-16, 2000.

[69] T.M. Schmidl, A. Gatherer, X. Wang and R. Chen. "Interference Cancellation using the Gibbs Sampler". *Proceedings of the 2000 IEEE Semi Annual Vehicular Technology Conference (VTC'00-Fall)*, Boston, MA, September 27-29, 2000.

[70] X. Wang and R. Chen. "Monte Carlo Methods for Adaptive Turbo Multiuser Detection". *Proceedings of the 9th IEEE Digital Signal Processing Workshop*, Hunt, Texas, October 15-18, 2000. (Invited)

[71] Cai, Z. and Chen, R. (2006) 'Flexible Seasonal Time Series Models' *Advances in Econometrics, Vol.20/B - Econometric Analysis of Financial and Economic Time Series*, Edited by: Fomby, T.B. and Terrell, D. page 63-88

Other publications and Technical Reports:

[72] Chen, R. (1992) 'Review of 'Time Series: Theory and Methods *second edition*, authors: P. Brockwell and R. Davis", *Journal of American Statistical Association*, **87**, 254-255.

[73] Chen, R. (1993) 'Review of 'Nonlinear Modeling and Forecasting, editors: M. Casdagli and S. Eubank", *International Journal of Forecasting*, **9**, 273-274.

[74] Guegan, D. and Chen, R. 'On estimation of β-ARCH model', *Technical report, Dept. of Stat. Texas A&M Univ.*

[75] Chen, R. Ellis, D. and Wood, R. 'The empirical distribution of intradaily stock return volatility', *Technical report, Dept. of Stat. Texas A&M Univ.*

Invited Presentations:

1990 'Functional coefficient autoregressive models', invited paper presented at the NSF/NBER Time Series Conference in San Diego, Oct. 1990, with R.S. Tsay.

1991 'Nonlinear additive autoregressive models', invited paper presented at the ASA/IMS joint annual meeting in Atlanta, Aug, 1991, with R.S. Tsay

1991 'Nonlinear additive autoregressive models', invited talk given at Worcester Polytechnic Institute, Worcester, MA. October, 1991, with R.S. Tsay

1992 'On open-loop threshold AR models', invited paper presented at the NSF/NBER Time Series Conference in Chicago, Oct. 1992,

1993 'Additivity tests for nonlinear autoregressive models', invited paper presented at 228th IMS Meeting, Laramie, Wyoming, June 1993, with J.S. Liu and R.S. Tsay.

1994 'Prediction using spatial-temporal models: A study of Ozone exposure in Harris County, Texas', invited paper presented at the NBER/NSF Meeting, October 1994, Fort Collins, CO. with R.J. Carroll et al.

1994 'Estimation and variable selection in nonlinear additive autoregressive models', invited talk given at Humboldt-universität zu Berlin, Germany and E.N.S.A.E., France.

1995 'Estimation and variable selection in nonlinear additive autoregressive models', invited talk given at the ICSA Statistical Conference, August, 1995, Beijing, China.

1995 'Nonparametric time series analysis, a selective review with examples', Invited paper presented at the 50th session of International Statistical Institute, August, 1995, Beijing, China.

1995 'Recent developments in nonlinear time series analysis', invited talk given at Beijing University, Beijing, China.

1997 'Smoothing with extra information and nonparametric multi-step prediction', invited talk given at Stanford University. Feb, 1997.

1997 'Forecasting with stable seasonal pattern models with an application of Hawaiian tourist data', Invited paper presented at Interface 97, Houston, TX. May. 1997.

1997 'Smoothing with extra information and nonparametric multi-step prediction', invited talk given at University of Bergen, Bergen, Norway. June, 1997.

1997 'Smoothing with extra information and nonparametric multi-step prediction', invited talk given at Universite P. Sabatier, Toulouse, France. July, 1997.

1997 'Smoothing with extra information and nonparametric multi-step prediction', invited talk given at NSF/NBER time series conference, Duke University, NC. Oct. 1997.

1997 'Smoothing with extra information and nonparametric multi-step prediction', invited talk given at University of California at Davis. CA. Dec. 1997.

1997 'Sequential Monte Carlo Methods for Dynamic Systems', invited talk given at Stanford University, CA. Dec. 1997.

1998 'Sequential Monte Carlo Methods for Dynamic Systems', invited talk given at 1998 Taiwan International Statistical Symposium', August, 1998

1998 'Sequential Monte Carlo Methods for Dynamic Systems', invited talk given at the ICSA Statistical conference, Kunming, China, August, 1998

1998 'Mixture Kalman Filter for Conditional Dynamic Linear Models', invited talk given at Graduate School of Business, University of Chicago, October, 1998.

1998 'Mixture Kalman Filter for Conditional Dynamic Linear Models', invited talk given at Department of Statistics, University of California at Los Angels, November, 1998

1998 'Extended Mixture Kalman Filter' invited talk given at Department of Statistics, University of North Carolina at Chapel Hill. November, 1998.

1999 'Monte Carlo Filter for Nonlinear Non-Gaussian Dynamic Systems' invited talk given at Department of Information and Decision Sciences, University of Illinois at Chicago. February, 1999.

2000 'Sequential Monte Carlo Methods for Nonlinear/NonGaussian State-Space Models', invited talk given at University of North Carolina, Charlotte, March, 2000.

2000 'Sequential Monte Carlo and Mixture Kalman Filters', invited talk given at Northwestern University, Chicago, April, 2000.

2000 'Nonparametric Time Series: A Review (Part I and II)', invited talk given at Peking University, Beijing, China, June, 2000.

2000 'Sequential Monte Carlo Methods for Nonlinear/Non-Gaussian Dynamic Systems (Part I, II and III)', invited talk given at Peking University, Beijing, China, June, 2000.

2000 'Adaptive Bayesian Multiuser Detection', invited talk given at ISIT 2000, Sorrento, Italy, June, 2000

2000 'Adaptive Joint Detection and Decoding in Flat-Fading Channels via Mixture Kalman Filtering', invited talk given at ISIT 2000, Sorrento, Italy, June, 2000

2000 'Monte Carlo Filters and Their Applications in Tracking and Wireless Communications', invited talk given at U.S. Army Conference on Applied Statistics, October, 2000.

2001 'Efficient Methods for Sequential Monte Carlo with Delay', invited talk given at University of Chicago, Jan. 2001.

2001 'Stable Seasonal Pattern Models with an Application Forecasting with Stable Seasonal Pattern Models', invited talk given at University of Illinois at Chicago, Department of Information and Decision Sciences. March, 2001.

2001 'Sequential Monte Carlo and Mixture Kalman Filters', invited talk given at University of Illinois at Chicago, Department of Mathematics, Statistics and Computer Sciences. March, 2001.

2001 'Sequential Monte Carlo and Its Applications in Chain Polymer Analysis', invited talk given at University of Illinois at Chicago, Department of BioEngineering, April, 2001.

2001 'Advanced Monte Carlo Filters and their Applications in Nonlinear/Non-Gaussian Dynamic Systems', invited talk given at Japan-US Joint Time Series Workshop, Kyoto, Japan, June, 2001

2001 'Combining Bayesian signal extraction with channel decoding using Monte Carlo', invited talk given at NOTC2001, Kyoto, Japan, December, 2001

2002 'Study Protein Geometry via Sequential Monte Carlo', invited talk given at ENAR Conference, Baltimore, March, 2002.

2002 'Study Protein Geometry via Sequential Monte Carlo', invited talk given at UIC Bioinformatics Symposium, Chicago, April, 2002.

2002 'Variable Selection Using Sequential Monte Carlo', invited talk given at Division of Epi/Biostatistics, School of Public Health, University of Illinois at Chicago, October, 2002.

2003 'Sequential Monte Carlo and its applications in protein structural analysis', invited talk given at University of Illinois at Urbana Champaign. April, 2003.

2003 'Prediction-Based Adaptive Compositional Model for Seasonal Time Series Analysis', NBER/NSF time series conference, Chicago, September, 2003

2004 'Independent Particle Filters' invited talk given at University of Illinois at Chicago, Department of Mathematics, Statistics and Computer Sciences. January, 2004.

2004 'Sequential Monte Carlo Methods and Their Applications: An Overview and Recent Development'. Tutorial lectures given at Institute of Mathematical Sciences, National University of Singapore, March 16-17, 2004.

2004 'Threshold Variable Selection in Threshold Models and Switching Autoregressive Models', invited talk given at The International Conference on Threshold Models and New Developments in Time Series, Hong Kang, July, 2004.

2004 'Variable Selection via Sequential Methods', invited talk given at the 2nd International Conference on Monte Carlo Methods, Boston, August, 2004.

2004 'Variable Selection via Greedy Search and Stochastic Optimization with Lookahead', invited talk given at Department of Statistics, Penn State University, September, 2004.

2005 'Threshold Variable Selection and Threshold Variable Driven Switching Autoregressive Models', invited talk given at Department of Mathematics, Washington University in St. Louis, Jan, 2005.

2005 'Time Series Properties of Cross-Sectional Equity Returns' Invited talk given at IMS meeting, Beijing, July, 2005.

2005 'Sequential Monte Carlo with Adaptive Look-ahead', invited talk given at Department of Statistics, Chinese University of Hong Kong, July, 2005.

2005 'Sequential Monte Carlo and Protein Structure', invited talk given at Joint Statistical Meetings, August, Minneapolis, 2005

2006 'Sequential Monte Carlo and Protein Structure', invited talk given at Georgia Tech, March, 2006.

2006 'Self-Selectivity in Firm's Decision to Withdraw IPO: Bayesian Inference for Hazard Models of Bankruptcy with Feedback', invited talk given at ICSA symposium, June, U. Connecticut, 2006

2006 'Constrained Sequential Monte Carlo', invited talk given at Joint Statistical Meetings, August, Seattle, 2006.

2006 'Sequential Monte Carlo Methods and Their Applications: An Overview and Recent Developments', invited talk given at Department of Statistics, Columbia University, 2006

2006 'Sequential Monte Carlo Methods and Their Applications: An Overview and Recent Developments', invited talk given at Department of Statistics, University of Minnesota, 2006

2006 'Sequential Monte Carlo Methods and Their Applications: An Overview and Recent Developments', invited talk given at Department of Statistics, Yale University, 2006

2006 'Sequential Monte Carlo Methods and Their Applications: An Overview and Recent Developments', invited talk given at Department of Statistics, Michigan State University, 2006

2007 'Sequential Monte Carlo Methods and Their Applications: An Overview and Recent Developments', invited talk given at Department of Statistics, Case Western Reserve University. 2007.

2007 'Sequential Monte Carlo Methods and Their Applications: An Overview and Recent Developments', invited talk given at DIMACS center, Rutgers University. 2007.

2007 'Quantile Momentum'. invited talk given at 'Financial Engineering and Risk Management 2007' conference, Beijing, 2007.

2007 'Sequential Monte Carlo Methods and Their Applications: An Overview and Recent Developments', invited talk given at Department of Statistics, University of Iowa, 2007.

2007 'Inferences on Diffusion Processes with Sequential Monte Carlo', invited talk given at Joint Statistical Meetings, Salt Lake City, August 2007.

2007 'Sequential Monte Carlo Methods and Their Applications: An Overview and Recent Developments', invited talk given at Department of Statistics, Rutgers University, 2007.

2007 'Sequential Monte Carlo Methods and Their Applications: An Overview and Recent Developments', invited talk given at Department of Statistics, North Carolina State University, 2007.

2008 'Sequential Monte Carlo Methods and Their Applications: An Overview and Recent Developments', invited talk given at Department of Statistics, University of California at Riverside, 2008.

2008 'Constrained Sequential Monte Carlo', invited talk given at Department of Statistics, University of California at Los Angeles, 2008.

2008 'Constrained Sequential Monte Carlo', invited talk given at Department of Statistics, Northwestern University, 2008.

2008 'Statistical inferences of diffusion processes with Sequential Monte Carlo', invited talk given at Princeton Day of Statistics, Princeton University, 2008.