

Brief CV of Wai Keung LI

NAME : LI, Wai Keung

EDUCATION: Ph.D., 1981, University of Western Ontario; M.A., 1976, York (Canada); B.Sc., (First Class with Distinction) 1975, York (Canada).

PRESENT POSITION:

Chair Professor, Department of Statistics & Actuarial Science, University of Hong Kong since 2000 (joined HKU as Lecturer in 1983).

Head, Department of Statistics and Actuarial Science, University of Hong Kong, 2006-2008.

FIELD OF MAJOR RESEARCH INTERESTS:

Time Series Analysis, Stochastic Analysis, Financial and Insurance Risk Management, Environmental Statistics.

ACADEMIC AWARDS AND HONOURS:

Outstanding Research Student Supervisor Award HKU (1999)

Outstanding Researcher Award HKU (2001)

Croucher Foundation Senior Research Fellow (2003)

Elected Member, International Statistical Institute (1991)

Elected Fellow, American Statistical Association (2003)

Elected Fellow, Institute of Mathematical Statistics (2006)

SELECTED PUBLICATIONS:

Book:

1. "Diagnostic Checks in Time Series", Chapman & Hall, 2004;

Journal Papers:

1. "Least Absolute Deviation Estimation for Fractionally Integrated Autoregressive Moving Average Time Series Model with Conditional Heteroscedasticity", 2008, to appear in *Biometrika* (with G Li);
2. "Testing for Threshold Moving Average with Conditional Heteroscedasticity", 2008, to appear in *Statistica Sinica* (with G Li);
3. "A Method of Estimating the Noise Level in a Chaotic Time Series", 2008, to appear in *Chaos* (with AW Jayawardena and P Xu);
4. "A Time-Series Risk Model with Constant Interest for Dependent Classes of Business", 2007, *Insurance: Mathematics and Economics* (with Z Zhang and KC Yuen);
5. "The Gerber-Shiu Expected Discounted Penalty Function for Risk Processes with Interest and a Constant Dividend Barrier", 2007, *Insurance: Mathematics and Economics* (with KC Yuen and G Wang);

6. "Threshold Variable Selection Using Nonparametric Methods", 2007, *Statistica Sinica* (with Y Xia & H Tong);
7. "Diagnostic Checking for Time Series Models with Conditional Heteroscedasticity Estimated by the Least Absolute Deviation Approach", 2005, *Biometrika* (with G Li);
8. "An Adaptive Estimation of Dimension Reduction Space (with discussion)," 2002, *J. Royal Stat. Soc. B* (with Y Xia, H Tong & L Zhu);
9. "Estimation for Partially Nonstationary Multivariate Autoregressive Models with Conditional Heteroscedasticity," 2001, *Biometrika* (with S Ling & H Wong);
10. "On a Mixture of Autoregressive Conditional Heteroscedastic Model," 2001, *J. Amer. Stat. Assoc.* (with A C S Wong);
11. "On a Mixture Autoregressive Model," 2000, *J. Royal Stat. Soc. B* (with A C S Wong);
12. "On Single-Index Coefficient Regression Models," 1999, *J. Amer. Stat. Assoc.* (with Y Xia);
13. "Limiting Distribution of Maximum Likelihood Estimators for Unstable ARMA Time Series with GARCH errors," 1998, *Annals of Statistics* (with S Ling);
14. "On Fractionally Integrated Autoregressive Moving Average Time Series Models with Conditional Heteroscedasticity," 1997, *J. Amer. Stat. Assoc.* (with S Ling);
15. "Testing Model Adequacy for Some Markov Regression Models for Time Series," 1991, *Biometrika*;
16. "A Goodness of Fit Test in Robust Time Series Modelling," 1988, *Biometrika*;
17. "Fractional Time Series Modelling," 1986, *Biometrika* (with A I McLeod);

PROFESSIONAL ACTIVITIES:

Chinese International Statistical Association: Board of Directors of ICSA, 2006-2007;. Program Committee (2002-2007); Chairman, Organizing Committee of the 5th ICSA International Conference, Hong Kong, (Aug. 2001).

President, Hong Kong Statistical Society (2000-2001, 2001-2002, 2002-2003).

Chairman, Professional Affairs Committee, Hong Kong Statistical Society, 2003- present.

Member, Statistical Advisory Board, HKSAR Government, June 2002 - May 2008.

SELECTED CONSULTATION EXPERIENCE:

- (1) A US\$37,000 contract from Microsoft to develop software on financial risk management for the C# environment, 2004-2005 (with P Yu).
- (2) A \$600,000 contract with Hong Kong Exchanges and Clearing Ltd. on risk management, 2002-2003: margin levels, collateral requirements and reserve size.
- (3) A \$200,000 contract with Hong Kong Monetary Authority for developing Economic & Financial Indicators, 2002-2003 (with P Yu and M Tse).
- (4) Development of a Personal Banking System for the Bank of China Group. A one million dollar project completed in 1998 and launched in November 1999 (with K Lam, P Yu and H Tong).