Short Curriculum Vitae of Professor Howell Tong

Born in Hong Kong

Education

B.Sc (1966), M.Sc (1969), Ph.D (1972) all from the University of Manchester.

Employment

1967-1968: Lecturer in Mathematics, Polytechnic of North London, UK
1968-1970: Demonstrator in Mathematics, UMIST, UK
1970-1977: Lecturer in Statistics, UMIST, UK
1977-1982: Senior Lecturer in Statistics, UMIST, UK
1982-1985: Founding Chair of Statistics, Chinese University of Hong Kong, Hong Kong
1986-1999: Chair of Statistics, University of Kent at Canterbury, UK
1999-2004: Chair of Statistics and sometimes Pro-Vice Chancellor and Founding Dean of the Graduate School, University of Hong Kong
1999-: Chair of Statistics, London School of Economics, UK

Honours

1983: Member of the International Statistical Institute
1993: Fellow of the Institute of Mathematical Statistics
1994: Special Plenary Lecturer at 15th Nordic Meeting in Mathematical Statistics
1999: Honorary Fellow, Institute of Actuaries, England
1999: Alan T. Craig Lecture, University of Iowa, USA
2000: Foreign member of the Norwegian Academy of Science and Letters
2000: National Natural Science Prize, China (Mathematics, Class 2)
2002: Distinguished Research Achievement Award, University of Hong Kong.
2007: Guy medal in Silver (Royal Statistical Society, UK)

Editorships

1988: Guest editor, the Statistician
1991-1994: Associate editor, JRSS (B)
1994: Joint editor, *Chaos and Prediction*, Phil. Trans. Roy. Soc. (London) (with (now Lord) Robert May and Dr. Bryan Grenfell)
1991-1999: Associate editor, Statistica Sinica
1993-: Series editor, Nonlinear time series and chaos, World Scientific
1996-: Associate editor, Biometrika
1997-: General editor, Applied Probability and Statistics Series, Chapman and Hall/CRC

Visiting Professorships

1987: Mathematical Centre, Swiss Federal Polytechnic, Zurich, Switzerland
1990: Fourier University of Grenoble, France
1993: Chinese University of Hong Kong
1997: Wall Institute, University of British Columbia, Canada
1997-1999: University of Hong Kong
2000-2004: Academy of Mathematical and System Sciences, Beijing, China
2002: The University of Western Australia, Perth, Australia
2004-: University of Hong Kong

University Administration

2002-2004: Pro-Vice-Chancellor (Administration and Development), the University of Hong Kong.
July-December 1998 & June-July 2000: Acting Pro-Vice-Chancellor (Research), the University of Hong Kong.
1998-2002: Founding Dean, Graduate School, the University of Hong Kong.
1998-1999: Member, Ad Hoc Advisory Group to the Vice-Chancellor, the University of Hong Kong, 1998-9.
1993: Elected Member, Nominating Committee for the Appointment of a new Vice-Chancellor.
1990-1993: Director, Institute of Mathematics and Statistics, University of Kent, U.K.
1986-1994: Member of Senate, University of Kent, U.K.
1986-1989: Member of Council, University of Kent, U.K.
1986-1989: Member of Finance Committee, University of Kent, U.K.
1983-1985: Member of Senate, Chinese University of Hong Kong.
1983-1985: Member of the Budget Committee, Chinese University of Hong Kong,
1983-1985: Member of Council of the City Polytechnic of Hong Kong.

Services to the Profession

1983-4: President of the Hong Kong Statistical Society

1999: Nominating Committee for President and Council Member, Institute of Mathematical Statistics

1999-2001: Council member and Chair of European Section, Bernoulli Society

2001-now: Invited by the Royal Swedish Academy of Sciences to nominate candidates for the Sveriges Riksbank Prize in Economics (commonly called the ‘Nobel Prize in Economics’)

Publications (in reversed chronological order)

Books

2001: Chaos: a statistical perspective. Springer Verlag 300pp. (with K. S. Chan)

1990: Non-linear Time Series: A Dynamical System Approach. Oxford University Press, 564pp.

1983: Threshold Models in Non-linear Time Series Analysis. Lecture Notes in Statistics, No.21, New York: Springer-Verlag, 323pp.

Editions

2000: *Statistics and Finance: an interface*. (jointly with W. S. Chan and W. K. Li). Imperial College Press, 384pp.

1995: *Chaos and Forecasting*, Volume 2 in the series Nonlinear Time Series and Chaos, Singapore: World Scientific, 1995, 345pp. (A substantially expanded version of the one below and with the consent and support of the Royal Society of London.)

1994: *Chaos and Forecasting*, Philosophical Transactions of the Royal Society of London, Series A, Volume 348, Number 1688, pp. 323-538, (jointly with (-now Lord) Professor Robert May and Dr. Bryan Grenfell) .

1993: *Dimension Estimation and Models,* Volume 1 in the series Nonlinear Time Series and Chaos, Singapore: World Scientific, 223pp.

1988: SPECIAL ISSUE: *Statistical Forecasting and Decision-Making*, The Statistician, Vol.37 No.2 (as Technical Editor).

Papers

(Papers in refereed journals are unmarked, edited volumes are marked e and proceedings are marked p.)

2007

149. Estimation and Tests for Power-Transformed and Threshold GARCH Models. (with J. Pan). *J. Econometric Theory.* (to appear).

148. Estimation of the covariance matrix of random effects in longitudinal studies. (with Y. Sun and W. Zhang). *Ann. Statist*. (to appear).

147. Ergodicity and Invertibility of Threshold MA Models. (with S. Ling). *Bernoulli*. Vol. 13, 161-168.

146. Threshold variable selection using nonparametric methods. (with Y. Xia and W. K. Li*) Statistica Sinica*, vol. 17, 265-288.

145. Semiparametric penalty function method in partially linear model selection. (with C Dong and J. Gao). *Statistica Sinica*, vol. 17, 99-114.

144. Birth of the threshold time series model. *Statistica Sinica*, vol. 17, 8-14.

2006

143. On Bayesian value at risk: from linear to non-linear portfolios. (with T. K. Siu and H. Yang) *Asian Pacific Financial Markets*, vol. 11, 161-184.

142. Cumulative effects of air pollution on public health. (with Y. Xia) *Statistics in Medicine,* vol. 25, 3548-3559.

141. On efficiency of estimation for a single-index model. (with Y. Xia) *Frontiers in Statistics,* ed. J. Fan and H. Koul, 63-85.

140. On a simple graphical approach to modelling economic fluctuations with an application to UK price inflation 1265-2005. (with W. S. Chan and M. W. Ng) *Annals of Actuarial Sc*., vol. 1,103-128.

139. Selecting models with different spectral density matrix structure by the cross-validated log likelihood criterion. (with Y. Matsuda and Y. Yajima), *Bernoulli*, vol. 12, 221-249.

138. Option pricing under threshold autoregressive models by threshold Esscher transform. (with T. K. Siu and H. Yang) *J. Industrial & Management Optimization*, vol. 2, 177-197.

137. A note on time-reversibility of multivariate linear processes (with K. S. Chan & L-H Ho), *Biometrika*, Vol. 93, 221-227.

2005

136. Testing for a linear MA model against threshold MA models. (with S. Ling) *Annals of Statistics*, vol. 33, 2529-2552.

135. On time-reversibility of multivariate linear processes. (with Z. Zhang). *Statistica Sinica*, vol. 15, 495-504.

2004

134. Some nonlinear threshold autoregressive time series models for actuarial use. (with W. S. Chan and A. C. S. Wong). *North American Actuarial Journal*, vol. 8, 37-61.

133. On pricing derivatives under GARCH models: a dynamic Gerber-Shiu approach. (with T. K. Siu and H. Yang), *North American Actuarial Journal*, vol. 8, 17-31.

132. A note on stochastic difference equations and its application to GARCH models. (with Z. Zhang). *Chinese Journal of Applied Probability and Statistics*, vol. 20, 259—269.

131. A note on testing for multi-modality with dependent data. (with K. S. Chan). *Biometrika*, vol. 91, 113-123.

130. Efficient estimation for semivarying-coefficient models. (with Y. Xia & W. Zhang). *Biometrika*, vol. 91, 661-681.

129e. Statistical tests for Lyapunov exponents of deterministic systems. (with R.C.L. Wolff and Q. Yao). *Studies in Nonlinear Dynamics and Econometrics (Special Issue)*. Vol. 8, Issue 2. [Also in *Linear and Non Linear Dynamics in Time Series*, Proceedings of the Cofin 2000 Final Workshop, Bressanone-June 6-7, 2003, pp 283-301.]

128. Semiparametric nonlinear time series model selection. (with J. Gao). *J. Roy. Statist. Soc.*, B, vol. 66, 321-336.

127. Testing for common structures in a panel of threshold models. (with K. S. Chan and N. Chr. Stenseth). *Biometrics*, vol. 60, 225-232.

126. A goodness-of-fit test for single-index models. (with Y. Xia, W. K. Li and D. Zhang). *Statistica Sinica*, vol. 14, 1-28;34-39.

2003

125. Smoothing for spatio-temporal models and application in modelling muskrat-mink interaction. (with W. Zhang, Q. Yao and N. C. Stenseth). *Biometrics*, vol. 59, 813-821.

2002

124. Model specification tests in nonparametric stochastic regression models. (with J. Gao and R. C. L. Wolff). *J. Multivariate Analysis*, vol. 83, 324-359.

123. Single-index volatility and estimation. (with Y. Xia and W.K. Li). *Statistica Sinica*, vol. 12, 785-799.

122. An adaptive estimation of dimension reduction space-with discussion. (with Y. Xia, W.K. Li \& L. Zhu). *J.Roy. Stat. Soc*., B, vol. 64, 363-410.

121. A note on the equivalence of two approaches for specifying a Markov process. (with K. S. Chan). *Bernoulli*, vol. 8, 117-122.

120. Adaptive orthogonal series estimation in additive stochastic regression models. (with J. Gao and R. C. L. Wolff). *Statistica Sinica*, vol. 12, 409-428.

119. Nonlinear time series analysis since 1990: some personal reflections. *Acta Mathematicae Appllicatae Sinica,* (English Series), vol. 18, 177-184.

118e. Dynamic model. (with K. S. Chan). *Encyclopaedia of Environmetrics*, vol. 1, 574-8. John Wiley.

2001

117. On some distributional properties of a first order non-negative bilinear time series model. (with Z. Zhang). *J Appl. Prob*., vol. 38, 659-671.

116. Bayesian risk measures for derivatives for random Esscher transform. (with T. K. Siu and H. Yang). *North Amer. Actuarial J*., vol. 5, 78-91.
115. A personal journey through time series in Biometrika. *Biometrika*, vol. 88, 195-218.

114. Bootstrap estimation of actual significance levels for tests based on estimated nuisance parameters. (with Q. Yao and W. Zhang). *Statistics and Computing*, vol. 11, 367-371.

113. A conditional density approach to the order determination of time series. (with B. Finkenstadt, and Q. Yao). *Statistics & Computing*, vol. 11, 229-240.

112e. Advanced methods. (with W. K. Li). *International Encyclopaedia of the Social & Behavioral Sciences*, Vol. 23, 15699-15704. New York: Elsevier.

2000

111. Common structure in panels of short ecological time-series. (with Q. Yao, B. Finkenstadt and N. C. Stenseth). *Proc. Roy. Soc. Lond*.}, B 267, 1-9.

110e. Interval prediction of financial time series. (with B. Cheng). *Statistics and Finance: an interface*, ed. W. S. Chan, W. K. Li and H. Tong, Imperial College Press, 245-260.

109e. A note on kernel estimation in integrated time series. (with Y. Xia and W. K. Li) *Statistics and Finance: an interface*, ed. W. S. Chan, W. K. Li and H. Tong, Imperial College Press, 86-96.

108. Nonparametric estimation of ratios of noise to signal in stochastic regression. (with Q. Yao). *Statistica Sinica*, vol. 10, 751-770.

107. On the estimation of an instantaneous transformation for time series. (with Y. Xia, W.K. Li & L. Zhu). *J. Roy. Statist. Soc*., B, vol. 62, 383-397.

1999

106. On extended partially linear single-index models. (with Y. Xia and W. K. Li). *Biometrika*, vol. 86, 831-842.

105p. Some recent nonparametric tools for time series data analysis. *Bull. ISI, 52nd Session*, Invited Paper Book1, 387-390.

104. Common dynamic structure of Canadian lynx populations within three geo-climatic regions. (with N. C. Stenseth, K. S. Chan, R. Boonstra, S. Boutin, C. J. Krebs, E. Post, M. O'Donoghue, N. G. Yoccoz, M. C. Forchhammer, and J. W. Hurrell). *Science}*, vol. 285, pp. 1071-1077.

103. A test for symmetries of multivariate probability distributions. (with C. Diks). *Biometrika,* vol. 86, 605-614.

1998

102. Phase- and density-dependent population dynamics in Norwegian lemmings: interaction between deterministic and stochastic processes. (with N. C. Stenseth, K. S. Chan and E. Framstad), *Proc. Roy. Soc*. Series B, vol. 265, 1957-1968.

101. From patterns to processes: phase- and density-dependence in the Canadian lynx cycle. (with N. C. Stenseth, K. S. Chan, W. Falck, O. N. Bjornstad, M. O'Donoghue, R. Boonstra, S. Boutin, C. J. Krebs and N. G. Yoccoz), *Proc. National Acad. Sc*., vol. 95,15430-15435.

100. On the statistical inference of a machine generated autoregressive AR(1) model. (with J-P Stockis), *J. Roy. Stat. Soc*.}, B, vol. 60, 781-796.

99. K-stationarity and wavelets. (with B.Cheng). *J. Stat. Planning and Inf*., vol. 68, 129-44.

98. Cross-validatory bandwidth selection for regression estimation based on dependent data. (with Q. Yao), *J. Stat. Planning and Inf*., vol. 68, 387-415.

97e. Threshold models. *Encyclopaedia of Statistical Sciences* (U), vol. 2, Ed. S. Kotz, N. L. Johnson and C. B. Read. New York: Wiley, pp. 664-6.

96. A bootstrap detection for operational determinism. (with Q. Yao), *Physica D,* vol. 115, 49-55.

95e. Nonlinear time series analysis. *Encyclopaedia of biostatistics*, Ed. P. Armitage & T. Colton. New York: Wiley, pp. 3020-4.

1997

94e. Some comments on nonlinear time series analysis. Field's Inst. Comm., vol. 11, 17-27.

1996

93e. A theory of wavelet representation and decomposition for a general stochastic process. (with B. Cheng), In *Athens Conference on Applied Probability and Time Series*, Vol. II: *Time Series Analysis in Memory of E. J. Hannan*, ed. P.M.Robinson and M.Rosenblatt, Lecture Notes in Statistics, Number 115, Heidelberg: Springer-Verlag, 115-129.

92. Estimating conditional densities and sensitivity measures in nonlinear time series. (with J. Fan and Q. Yao), *Biometrika*, vol. 83, 189-206.

91e. On Delay Co-ordinates in Stochastic Dynamical Systems. (with B. Cheng), In *Stochastic and spatial structures of dynamical systems*, ed. S. J. van Strien and S. M. Verduyn Lunel, Royal Netherlands Academy of Arts and Science, Amsterdam: North-Holland, 29-37.

90. Asymmetric least squares regression estimation: a nonparametric approach. (with Q. Yao), *Nonparametric Statist*., vol. 6, 273-292.

1995

89. A personal overview of nonlinear time series from a chaos perspective (with discussions). *Scan. J. Statist*., vol. 22, 399-445.

88p. On initial-condition sensitivity and prediction in nonlinear stochastic systems. (with Q. Yao), *Bull. Int. Statist. Inst*., 50th Session, Beijing, China, vol. IP 10.3, 395-412.

87e. An overview on chaos. In *Complex Stochastic Systems and Engineering*, IMA Conference Series, New Series, Number 54, Ed. D.M.Titterington, Oxford University Press, 3-11.

1994

86e. Akaike's approach can yield consistent order determination. *Frontiers of Statistical Modeling: An Information Approach*, Ed. H.Bozdogan, Kleuwer Academic Publication, 93-103.

85. A note on noisy chaos. (with K.S.Chan), *J. Roy. Statist. Soc*., B, vol. 56, 301-311.

84e. Comments on prediction by nonlinear least squares methods. Chapter 17 in *Probability, Statistics and Optimization: A tribute to Peter Whittle*, Ed. F.Kelly, London: J.Wiley.

83. Quantifying the influence of initial values in nonlinear prediction. (with Q.Yao), *J. Roy. Statist. Soc*., B, vol. 56, 701-25.

82. On subset selection of stochastic regression model. (with Q. Yao), *Statistica Sinica*, vol. 4, 51-70.

81. On prediction and chaos in stochastic systems. (with Q. Yao), *Philos. Trans. Roy. Soc.* (London), A, vol. 348, 357-369.

80. Orthogonal projection, embedding dimension and sample size in chaotic time series from a statistical perspective. (with B. Cheng), *Philos. Trans. Roy. Soc*. (London), A, vol. 348, 325-41.

1993

79. On residual sums of squares in non-parametric autoregression. (with B.Cheng), *Stochastic Processes and Their Applications*, vol. 48, 157-174.

78e. Nonparametric function estimation in noisy chaos. (with B.Cheng), *Developments in Time Series Analysis*, Ed. T.Subba Rao, London: Chapman and Hall, 183-206.

77. A note on tests for threshold-type nonlinearity in open loop systems (with A.E.Sorour), *Applied Statistics*, vol. 42, 95-104.

76. Between chance and chaos, *Twenty-first Century*, The Research Institute of Chinese Culture, The Chinese University of Hong Kong, vol. 20, 90-98.

1992

75e. Contrasting aspects of nonlinear time series analysis. {\it New Directions in Time Series Analysis}, Part I, *IMA Volumes in Maths & Its Appl*, vol. 45, Ed. D.Brillinger et al, Berlin: Springer-Verlag, pp 357-370.

74. Some comments on a bridge between nonlinear dynamicists and statisticians*. Physica D*, vol. 58, 299-303.

73. Likelihood plots, influential data and reparametrization in nonlinear time series modelling. (with K.S.Chan and R.Moeanaddin), *Proceedings of 1990 Taipei Symposium in Statistics*, Taipei, Taiwan, Ed. M.T.Chao & P.E.Cheng, Institute of Statistical Science, Taiwan, pp. 37-62.

72. Consistent nonparametric order determination and chaos--with Discussion. (with B.Cheng), *J. Roy. Statist. Soc*., B, vol. 54, 427-449 and 451-474.

71. A note on one-dimensional chaotic maps under time reversal. (with B.Cheng), *Adv. Appl. Prob*., vol. 24, 219-220.

1991

70. Threshold autoregressive modelling in continuous time. (with I.Yeung), *Statistica Sinica*, vol. 1, 411-430.

69. Strong consistency of least-squares estimator for a non-ergodic threshold autoregressive model. (with D.T.Pham and K.S.Chan), *Statistica Sinica*, vol. 1, 361-369.

68. On tests for self-exciting threshold autoregressive-type nonlinearity in partially observed time series. (with I.Yeung), *Applied Statistics*, vol. 40, 43-62.

1990

67. Is bilinear model an illusion? (with R.Moenaddin). *Statistique et Analyse des Donnees*, vol. 15, 57-60.

66. On likelihood ratio tests for threshold autoregression. (with K.S.Chan), *J. Roy. Statist. Soc*., B, vol. 52, 469-476.

65. Clusters of time series models: an example. (with P.Dabas*), J. Applied Statistics*, vol. 17,187-198.

64. Numerical evaluation of distributions in non-linear autoregression (with R.Moeanaddin), *J. Time Series Analysis*, vol. 11, 33-48.

63. On tests for threshold-type non-linearity in irregularly space time series. (with I.Yeung), *J. Statist. Comp. and Simulations*, vol. 34, 177-194.

1989

62. A practical method for outlier detection in autoregressive time series modelling. (with M.C.Hau*), Stochastic Hydrology and Hydraulics*, vol. 3, 241-260.

61p. Strong consistency of the least squares estimator for a non-stationary threshold autoregressive model. (with D.T.Pham and K.S.Chan), *Bull. Int. Stat. Inst*., 47th Session, C.P. Book 2, pp. 202-203---full version appeared in Statistica Sinica, see paper 69.

60e. Threshold, stability, non-linear forecasting and irregularly sampled data. *Statistical Analysis & Forecasting Economic Structural Change*, ed. P.Hackl, IIASA, Berlin: Springer- Verlag, 279-296.

59. Non-linear time series models of regularly sampled data: A review (an expanded version of paper 52). *Progress in Mathematics* (China), vol. 18, 22-43.

58e. A survey of the statistical analysis of univariate threshold autoregressive models. (with K.S.Chan), *Advances of Statistical Analysis and Statistical Computing*, vol. 2, JAI Press Inc., U.S.A., 1-42.

1988

57. A note on local parameter orthogonality and Levinson-Durbin algorithm. *Biometrika*, vol. 75, 788-9.

56. A comparison of likelihood ratio test and CUSUM test for threshold autoregression. (with R.Moenaddin), *The Statistician*. Vol. 37, 213-225 (Addendum & Corrigendum in 37, 493-4).

55. On multi-step non-linear least-squares prediction. (with R.Moenaddin), *The Statistician,* vol. 37, 101-110.

54e. Non-linear time series modelling in population biology: a preliminary case study. *Nonlinear Time Series and Variable Structure in Signal Processing*. Ed. R. Mohler. Lecture Notes in Control & Information Science. 106, Heidelberg: Springer-Verlag, 75-87.

1987

53. A note on embedding a discrete parameter ARMA model in a continuous parameter ARMA model. (with K.S.Chan), *J. Time Series Analysis*, vol. 8, 277-281.

52p. Non-linear time series models of regularly sampled data: a review. *Proc. of First World Congress of the Bernoulli Society*, ed. Y.V.Prohorov \& V.V.Sazonov, 2, 355-367. Holland:VNU Science Press. (Note: The expanded version of this paper appeared as paper 59.)

1986

51. On tests for non-linearity in time series analysis. with W.S.Chan), *J. Forecasting,* vol.5, 217-228.

50. A note on certain integral equations associated with non-linear time series analysis. (with K.S.Chan), Probability *Theory and Its Related Fields*, vol. 73,153-158.

49. On estimating thresholds in autoregressive models. (with K.S.Chan), *J. Time Series Analysis*, vol. 7, 179-190.

1985

48. Threshold time series modelling of two Icelandic riverflow systems. (with B.Thanoon & G. Gudmundsson)*, Water Resources Bulletin*, vol. 21, 651-661.

47. On the use of the deterministic Lyapunov function for the ergodicity of stochastic difference equations. (with K.S.Chan), *Adv. Appl. Prob*., vol.17, 666-678.

46. A multiple threshold AR(1) model. (with K.S.Chan, J.D.Petruccelli and S.W.Woolford), *J. Appl. Prob.,* vol. 22, 267-279.

1984

45. A note on sub-system stability and system stability. (with K.S.Chan), *J. Eng. Mathematics* (China), vol. 1, Pt.2, 43-51.

1983

44p. Threshold time series models of some riverflow data. *Proc. 44th Session of ISI*, vol. C.P.46} 8.

43e. Threshold autoregression and some frequency-domain characteristics (with J. Pemberton). *Handbook of Statistics*, vol. 3, ed. D.R.Brillinger & P.R.Krishnaiah, North-Holland, 249-273.

42. On the distribution of a simple stationary bilinear process. (with S. R. Wang and H. Z. An), *J. Time Series Analysis*, vol. 4, 209-216.

41. A statistical approach to difference-delay equation modelling in ecology-- two case studies. (with K.S.Lim), *J. Time Series Analysis*, vol. 4, 239-267. (Revised version of paper 39).

40. A note on delayed autoregressive process in continuous time. *Biometrika,* vol. 70, 710-712.

39e. A statistical approach to difference-delay equation modelling in ecology--two case studies (with K.S.Lim). *Rhythms in Biology and Other Fields of Application* ed. M. Cosnard et al. Lecture Notes in Biomathematics, 49, Springer-Verlag, 319-344. (See paper 41).

1982

38. Some personal experiences in popularising mathematical methods in the People's Republic of China, as a collaborator with the late Professor L. K. Hua, *Int. J. Math. Education in Sc. & Tech.,* vol. 13, 371-386.

37. A note on using threshold autoregressive models for multi-step-ahead prediction of cyclical data. *J. Time Series Analysis*, vol. 3, 137-140.

36. Discontinuous decision processes and threshold autoregressive time series modelling. *Biometrika*, vol. 69, 274-276.

35^e$. Multi-step-ahead forecasting of cyclical data by threshold autoregression. (with Z. M. Wu), *Time Series Analysis: Theory and Practice* 1, ed. O.D.Anderson, North-Holland, 733-753.

1981

34. A note on a Markov bilinear stochastic process in discrete time. *J. Time Series Analysis,* vol. 2, 279-284.

33. Data transformation and self-exciting threshold autoregression. (with D. K. Ghaddar), *J. Roy. Statist. Soc*., C, vol. 30, 238-248.

32. A note on the distribution of non-linear autoregressive stochastic processes. (with J. Pemberton), *J. Time Series Analysis*, vol. 2, 49-52.

1980

31p. Catastrophe in time series analysis? Paper read to Journees de Statistique, Universite Paul Sabatier, Toulouse, France, May 1980. Abstract in *Journees de Statistique*, Resume de Communications, 106.

30. On stability and limit cycles of non-linear autoregression in discrete time. (with J. Pemberton), *Cahiers du CERO*, vol. 22, 2, 137-148. Bruxelles.

29. Threshold autoregression, limit cycles and cyclical data--with discussion. (with K.S.Lim), *J. Roy. Statist. Soc*., B, vol. 42, 245-292.

28e. A view on non-linear time series model building. *Time Series*, ed. O. D. Anderson, 41-56, Amsterdam: North-Holland

1979

27. Final prediction error and final interpolation error: a paradox? *I.E.E.E. Trans. Inf. Th*., vol. IT-25, 758-759.

26. A note on a local equivalence of two recent approaches to autoregressive order determination. *Int. J. Control*, vol. 29, 441-446.

1978

25e. On a threshold model. *Pattern Recognition and signal processing*, NATO ASI Series E: Applied Sc. No. 29, ed. C.H.Chen. The Netherlands: Sijthoff & Noordhoff, 575-586.

24. On the asymptotic joint distribution of the estimated autoregressive coefficients. *Int. J. Control*, vol. 27, 801-807.

1977

23. Some comments on the Canadian Lynx data—with discussion. *J. Roy. Statist. Soc*., A 140, 432-436 and 448-468.

22. On the estimation of Pr{Y < X} for exponential families. *I.E.E.E.Trans. Reliability,* vol. R-26, 54-56.

21. More on AR model fitting with noisy data by AIC. *I.E.E.E. Trans. Inf. Th.,* vol. IT-23, 409-410.

1976

20. On Markov chain modelling to some weather data. (with P. Gates*), J. Appl. Meteorology*, vol. 15, 1145-1151.

19. Fitting a smooth moving average to noisy data. *I.E.E.E. Trans. Inf. Th*., vol. IT-22}, 493-496.

18. On a statistic useful for dimensionality reduction of linear stochastic systems. (with T.Sugiyama), *Communications in Statistics*, vol. A5(8), 711-721.

1975

17. Letter to the Editor. *Technometrics*, vol. 17, 393.

16. A simulation study of the estimation of evolutionary spectral functions. (with W-Y.T.Chan*), J. Roy. Statist. Soc*., C vol. 24, 334-341.

15. Autoregressive model fitting with noisy data by Akaike's information criterion. *I.E.E.E. Trans. Inf. Th*., vol. IT-21, 476-480.

14p. On the fitting of non-stationary autoregressive models in time series analysis. (with T. Ozaki), *Proc. 8th Hawaii Int. Conf. on System Sc*., Western Periodicals, North Hollywood, California, 225-226.

13. Determination of the order of a Markov chain by Akaike's information criterion. *J. Appl. Prob*., vol. 12, 488-497.

1974

12. Linear time-dependent systems. (with T. Subba Rao*), I.E.E.E .Trans. Auto. Control,* vol. AC-19, 736-737.

11. Applications of principal component analysis and factor analysis in stochastic control systems. (with M.B.Priestley and T. Subba Rao*), I.E.E.E. Trans. Auto. Control*, vol. AC-19, 730-734.

10. Note on the estimation of Pr{Y<X} in the negative exponential case. *Technometrics*, vol. 16, 625.

9. Frequency-domain approach to regulation of linear stochastic systems. *IFAC J. Automatica,* vol. 10, 533-538.

8. On time-dependent linear transformations of non-stationary stochastic processes. *J. Appl. Prob.,* vol. 11, 53-62.

7. Identification of the covariance structure of state space models. (with T. Subba Rao), *Bull. Inst. Math. & Appl*., vol. 11, No.5/6, May/June, 201-203.

1973

6. On some tests for time-dependence of a transfer function. (with T. Subba Rao), *Biometrika*, vol. 60, 589-597.

5. On the analysis of bivariate non-stationary processes--with discussion. (with M.B.Priestley*), J. Roy. Statist. Soc*., B, vol. 35, 153-166 and 179-188.

4. Some comments on spectral representations of non-stationary stochastic processes*. J. Appl. Prob.,* vol. 10, 881-885.

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Prepared on 19 March 2007