

REFERENCES

- Addison, P. S. and Low, D. J. (1996) Order and Chaos in the Dynamics of Vehicle Platoons, **Traffic Engineering and Control**, July/August, 456-459.
- Addison, P. S. and Low, D. J. (1998) A Novel Nonlinear Car-following Model, **Chaos**, Vol. 8, No. 4, 791-799.
- Adrangi, B., Chatrath, A., Dhanda, K. K. and Raffiee, K. (2001) Chaos in Oil Prices? Evidence from Futures Markets, **Energy Economics**, Vol. 23, No 4, 405-425.
- Ahmed, M. S. and Cook, A. R. (1982) Application of Time-series Analysis Techniques to Freeway Incident Detection, **Transportation Research Record**, No. 841, 19-21.
- Alligood, K.T., Sauer, T. D. and Yorke, J. A. (2000) **Chaos An Introduction to Dynamical Systems**, third printing, Springer-Verlag, New York.
- Barnett, W. A., Gallant, R. A., Hinich, J. M., Jungeilges, A. J., Kaplan, D. T. and Jensen, M. J. (1995) Robustness of Nonlinearity and Chaos Tests to Measurement Error, Inference Method, and Sample Size, **Journal of Economic Behavior and Organization**, Vol. 27, No. 2, 310-320.
- Barnett, W. A. and Chen, P. (1988) Deterministic Chaos and Fractal Attractors as Tools for Nonparametric Dynamical Econometric Inference, **Mathematical Computer Modeling**, Vol. 10, 275-296.
- Blanco, S., Figliola, A., Kochen, S., Rosso, O. A. and Salgado, P. (1997) Characterization of Brain Structures through EGG Activity by Nonlinear Dynamical Invariants, **Journal of the Neurological Sciences**, Vol. 150, No. 1, S24.
- Boccaletti, S., Grebogi, C., Lai, Y. C., Mancini, H. and Maza, D. (2000) The Control of Chaos Theory and Applications, **Physics Reports**, Vol. 329, No. 3, 103-197.
- Bogaert, Caroline, Beckers, Frank, Ramaekers, Dirk and Aubert, Andre' E. (2001) Analysis of Heart Rate Variability with Correlation Dimension Method in a Normal Population and in Heart Transplant Patients, **Autonomic Neuroscience**, Vol. 90, No. 1-2, 142-147.
- Brock, W. A. (1986) Distinguishing Random and Deterministic Systems, **Journal of Economic Theory**, Vol. 40, No. 1, 168-195.

- Brock, W. A., Hsieh, D. A., and Lebaron, B. (1991) **Nonlinear Dynamics, Chaos, and Instability: Statistical Theory and Economic Evidence**, MIT press, Cambridge, MA.
- Brock, W. A., Dechert, W. D., Scheinkman, J. A., and Lebaron, B. (1996) A Test for Independence Based on the Correlation Dimension, **Econometric Reviews**, Vol 15, No 2, 197-325.
- Davis, G. A. and Nihan, N. L. (1991) Nonparametric Regression and Short-term Freeway Traffic Forecasting, **Journal of Transportation Engineering**, Vol. 117, No. 2, 178-188.
- Disbro, J. E. and Frame, M. (1989) Traffic Flow Theory and Chaotic Behavior, **Transportation Research Record**, No. 1225, 109-115.
- Dendrinos, D. S. (1994) Traffic-flow Dynamics: a Search for Chaos, **Chaos, Solitons & Fractals**, Vol. 4, No. 4, 605-617.
- Eckmann, J. P., and Ruelle, D. (1985) Ergodic Theory of Chaos and Strange Attractors, **Reviews of Modern Physics**, Vol. 57, 617-56.
- Farmer, J. D. and Sidorowich, J. J. (1987) Predicting Chaotic Time Series, **Physical Review Letters**, Vol. 59, No. 8, 845-848.
- Ferreira, Fernando F., Francisco, Gerson, Machado, Birajara S. and Muruganandam, Paulsamy (2003) Time Series Analysis for Minority Game Simulations of Financial Markets, **Physica A**, Vol. 321, No.3-4, 619-632.
- Frison, T. W. and Abarbanel, H. D. I. (1997) Identification and Quantification of Nonstationary Chaotic Behavior, **IEEE International Conference on Acoustics, Speech, and Signal Processing**, Vol. 3, 2393-2396.
- Garfinkel, Alan (1997) Social and Organizational Chaos, **Mathematical Social Sciences**, Vol. 33, No. 1, 94.
- Geldof, Govert D. (1995) Adaptive Water Management : Integrated Water Management on the Edge of Chaos, **Water Science and Technology**, Vol. 32, No. 1, 7-13.
- Gencay, R. (1996) A Statistical Framework for Testing Chaotic Dynamics via Lyapunov Exponents, **Physica D**, Vol. 89, No 2, 261-266.
- Grassberger, P. and Procaccia, I. (1983) Measuring the Strangeness of Strange Attractors, **Physica D**, Vol. 9, 189-208.
- Harb, Ahmad M. (2004) Nolinear Chaos Control in a Permanent Magnet Reluctance Machine, **Chaos, Solitons and Fractals**, Vol. 19, No. 5, 1217-1224.

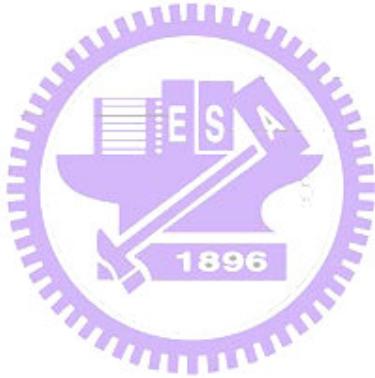
- Harb, Ahmad M. and Harb, Bassam A. (2004) Chaos Control of Third-order Phase-locked Loops Using Backstepping Nonlinear Controller, **Chaos, Solitons and Fractals**, Vol. 20, No. 4, 719-723.
- Hegger, R., Kantz, H., and Schreiber, T. (1999) Practical Implementation of Nonlinear Time Series Methods: the TISEAN Package, **Chaos**, Vol. 9, 617-33.
- Henon, M. (1976) A Two-dimensional Mapping with a Strange Attractor, **Communication in Mathematical Physics**, Vol. 50, 69-77.
- Hilborn, R. C. (1994) **Chaos and Nonlinear Dynamics: An Introduction for Scientists and Engineers**, Oxford University Press, New York.
- Iokibe, T., Kanke, M., Fujimoto, Y. and Suzuki, S. (1994) Short-term Prediction on Chaotic Time Series by Local Fuzzy Reconstruction Method, **Proceeding of the Third International Conference on Fuzzy Logic, Neural Nets and Soft Computing**, Iizuka, Japan, 491-492.
- Iokibe, T., Kanke, M. and Yasunari, F. (1995) Local Fuzzy Reconstruction Method for Short-term Prediction on Chaotic Time Series, **Fuzzy Set**, Vol. 7, No. 1, 186-194.
- Iokibe, T., Koyama, M. and Sugiura, T. (1996) An Application for Diagnosis by Chaotic Approach, **Journal of Robotics and Mechatronics**, Vol. 8, No. 4, 329-332.
- Iokibe, T., Koyama, M. and Taniguchi, M. (1997) Industrial Applications of Short-term Prediction on Chaotic Time Series by Local Fuzzy Reconstruction Method, **Proceedings of the First International Conference on Knowledge-Based Intelligent Electronic Systems**, Adelaide, Australia, Vol. 1, 126-130.
- Islam, M. N. and Sivakumar, B. (2002) Characterization and Prediction of Runoff Dynamics : A Nonlinear Dynamical View, **Advances in Water Resources**, Vol. 25, No. 2, 179-190.
- Jayanthi, Shekhar and Sinha, Kingshuk K. (1998) Innovation Implementation in High Technology Manufacturing: A Chaos-theoretic Empirical Analysis, **Journal of Operations Management**, Vol. 16, No. 4, 471-494.
- Jimenez, J., Moreno, A. and Ruggeri, G. J. (1992) Forecasting on Chaotic Time Series: A Local Optimal Linear-reconstruction Method, **Physical Review A**, Vol. 45, No. 6, 3553-3558.
- Kawamura, Akira, McKerchar, Alistair I., Spigel, Robert H. and Jinno, Kenji (1998) Chaotic Characteristics of the Southern Oscillation Index Time Series, **Journal of**

- Hydrology**, Vol. 204, No. 1-4, 168-181.
- Kantz, H. (1994) A Robust Method to Estimate the Maximal Lyapunov Exponent of a Time Series, **Physics Letters A**, Vol.185, 77-87.
- Kantz, H. and Schreiber, T. (1997) **Nonlinear Time Series Analysis**, Cambridge Nonlinear Science Series 7, Cambridge University Press.
- Kennel, M. B., Brown, R., and Abarbanel, H. D. I. (1992) Determining Minimum Embedding Dimension Using a Geometric Construction, **Physical Review A**, Vol.45, 3403-3411.
- Kennel, M. B. and Isabelle, S. (1992) Method to Distinguish Possible Chaos from Color Noise and to Determine Embedding Parameters, **Physical Review A**, Vol. 46, 3111.
- Logan, David, Mathew, Joseph (1996) Using the Correlation for Vibration Fault Diagnosis of Rolling Element Bearings-Basic Concepts, **Mechanical Systems and Signal Processing**, Vol. 10, No. 3, 241-250.
- Longstaff, M. G. and Heath, R. A. (1999) A Nonlinear Analysis of the Temporal Characteristics of Handwriting, Human Movement Science, **Human Movement Science**, Vol. 18, No. 4, 485-524.
- Lorenz, E. N. (1969) Atmospheric Predictability as Revealed by Naturally Occurring Analogues, **Journal of Atmospheric Sciences**, Vol.26, 636-646.
- Mandelbrot, B. B. (2000) **The Fractal Geometry of Nature**, Freeman and Company, New York.
- Mees, A. I. (1991) Dynamical Systems and Tesselations: Detecting Determinism in Data, **International Journal of Bifurcation and Chaos**, Vol. 1, No. 4, 777-794.
- Molnár, M., Skinner, J.E., Csépe, V., Winkler, I. and Karmos, G. (1995) Correlation Dimension Changes Accompanying the Occurrence of the Mismatch Negativity and the P3 Event-related Potential Component, **Electroencephalography and Clinical Neurophysiology**, Vol. 95, No. 2, 118-126.
- Murphy, Priscilla (1996) Chaos Theory as a Model for Managing Issues and Crises, **Public Relations Review**, Vol. 22, No. 2, 95-113.
- Newland, D. E. (1993) **An Introduction to Random Vibrations, Spectral and Wavelet Analysis**, Longman, Harlow.
- Osborne, A. R., Kirwin, A. D., Provenzale, A., and Bergamasco, L. (1986) A Search for Chaotic Behavior in Large Mesoscale Motions in the Pacific Ocean, **Physica D**, Vol.23, 75-83.

- Oshima, N. and Kosuda, T. (1998) Distribution Reservoir Control with Demand Prediction Using Deterministic-chaos Method, **Water Science and Technology**, Vol. 37, No. 12, 389-395.
- Panas, E. (2001) Long Memory and Chaotic Models of Prices on the London Metal Exchange, **Resources Policy**, Vol. 27, No. 4, 235-246.
- Paparella, F., Provenzale, A., Smith, L. A., Taricco, C., and Vio, R. (1997) Local Random Analogue Prediction of Nonlinear Processes, **Physics Letters A**, Vol.235, 233-240.
- Peak, D. and Frame, M. (1994) **Chaos under Control: the Art and Science of Complexity**, Freeman, New York.
- Pindyck, R. S. and Rubinfeld, D. L. (1997) **Econometric Models and Economic Forecasts**, 4th ed. McGraw Hill, Inc.
- Pottmeier A., Barlovic R., Knospe W., Schadschneider, A., and Schreckenberg, M. (2002) Localized Defects in a Cellular Automaton Model for Traffic Flow with Phase Separation, **Physica A**, Vol. 308, 471-482.
- Press, W. H., Flannery, B. P., Teukolsky, S. A., and Vetterling,W. T. (1992) **Numerical Recipes: the Art of Scientific Computing (2nd edn)**, Cambridge Press.
- Radhakrishna, R. K. A., Narayana Dutt, D. and Yeragani, Vikram Kumar (2000) Nonlinear Measures of Heart Rate Time Series: Influence of Posture and Controlled Breathing, **Autonomic Neuroscience**, Vol. 83, No. 3, 148-158.
- Rajkovic, Milan, Radivojevic, Vlada and Timotijevic, Dejan (1995) A Method for the Analysis of Electric and Manetic Spatio-temporal Patterns of the Human Brain, **Electroencephalography and Clinical Neurophysiology/Electromyography and Motor Control**, Vol. 97, No. 4, S208.
- Ruan, Jiong, Gu, En-Guo and Zhao, Wei-Rui (2004) Nonlinear Measures and Its Application to the Chaos Control, **Chaos, Solitons and Fractals**, Vol. 20, No. 2, 219-226.
- Ryan, Sheila M., Goldberger, Ary L., Pincus, Steven M., Mietus, Joseph and Lipsitz, Lewis A. (1994) Gender-and-Age-Related Differences in Heart Rate Dynamics: Are Women More Complex Than Man ?, **Journal of the American College of Cardiology**, Vol. 24, No. 7, 1700-1707.
- Sakawa, M., Kosuke, K. and Ooura, K. (1998) A Deterministic Nonlinear Prediction Model through Fuzzy Reasoning Using Neighborhoods' Difference and Its Application to Actual Time Series Data, **Fuzzy Set**, Vol. 10, No. 2, pp.381-386.

- Sakakura, Atsushi (2003) Acoustic Analysis of Snoring Sounds with Chaos Theory, **International Congress Series**, Vol. 1257, 227-230.
- Sano, M. and Sawada, Y. (1985) **Physical Review Letters**, Vol.55, 1082-5.
- Schadschneider, A. (2000) Statistical Physics of Traffic Flow, **Physica A**, Vol. 285, 101-120.
- Schittenkopf, Christian and Deco, Gustavo (1997) Identification of Deterministic Chaos by an Information-Theoretic Measure of the Sensitive Dependence on the Initial Conditions, **Physica D**, Vol. 110, No. 3-4, 173-181.
- Sivakumar, B. (2000) Chaos Theory in Hydrology Important Issues and Interpretations, **Journal of Hydrology**, Vol. 227, No. 1-4, 1-20.
- Skjeltorp, Johannes A. (2000) Scaling in the Norwegian Stock Market, **Physica A**, Vol. No. 3-4, 486-528.
- Smith, B. L. and Demetsky, M. J. (1997) Traffic Flow Forecasting: Comparison of Modeling Approaches, **Journal of Transportation Engineering**, Vol. 123, No. 4, 261-266.
- Smith, L. A. (1992a) Identification and Prediction of Low Dimensional Dynamics, **Physica D**, Vol. 58, 50-76.
- Solé, Ricard V. and Bascompte, Jordi (1995) Measure Chaos from Spatial Information, **Journal of Theoretical Biology**, Vol. 175, No. 2, 139-147.
- Snyder, Herbert and Kurtze, Douglas (1996) Chaotic Behavior in Computer Mediated Network Communication, **Information Processing and Management**, Vol. 32, No. 5, 555-562.
- Sprott, J. C. and Rowlands, G. (1995) **Chaos Data Analyzer**, Department of Physics, University of Warwick Coventry CV47AL England.
- Sprott, J. C. (2003) **Chaos and Time-Series Analysis**, Oxford University Press, New York.
- Sugihara, G. and May, R. M. (1990) Nonlinear Forecasting as a Way of Distinguishing Chaos from Measurement Error in Time Series, **Nature**, Vol.344, 734-41.
- Takens, F. (1981) Detecting Strange Attractors in Turbulence, in **Dynamical Systems and Turbulence**, 366-381, Springer-Verlag, Berlin.
- Tao, Yang, Yang, Lin-Bao and Yang, Chun-Mei (1998) Theory of Chaos Using Sampled Data, **Physics Letters A**, Vol. 246, No. 3-4, 284-288.
- Theiler, J., Eubank, S., Longtin, A., Galdrikian, B., and Farmer, J. D. (1992) Testing

- for Nonlinearity in Time Series: the Method of Surrogate Data, **Physica D**, Vol. 58, 77-94.
- Tucker, W. (1999) The Lorenz Attractor Exists, **Comtes Rendus de l'Academie des Sciences, Paris, Serie I, Matematique**, Vol. 328, 1197-1202.
- Wolf, D. E. (1999) Cellular Automata for Traffic Simulation, **Physica A**, Vol. 263, 438-451.
- Yoshida, Katsutoshi, Sato, Keijin, Yamamoto, Sumio and Yokota, Kazutaka (1997) Characterization of Chaotic Vibration without System Equations, **International Journal of Non-Linear Mechanics**, Vol. 32, No. 3, 547-562.
- Zhang, X. and Jarrett, D. F. (1998) Chaos in a Dynamic Model of Traffic Flows in an Origin-destination Network, **Chaos**, Vol. 8, No. 2, 503-513.



就讀博士班期間著作一覽表

AA. 投稿中論文(Working papers)

1. Lan, Lawrence W., **Feng-Yu Lin** and April Y. Kuo (2004), “A Parsimony Procedure to Test the Chaotic Traffic Flow Dynamics with Surrogate Data”.
2. Lan, Lawrence W., **Feng-Yu Lin** and April Y. Kuo (2004), “Prediction for chaotic time series with spatial and/or temporal similarity reasoning: the case of traffic flow dynamics”.

A. 與論文相關論文 (Refereed papers)

3. Lan, Lawrence W., **Feng-Yu Lin** and April Y. Kuo (2003), “Testing and Prediction of Traffic Flow Dynamics with Chaos,” Journal of the Eastern Asia Society for Transportation Studies, Vol. 5, pp. 1975-1990.
4. Lan, Lawrence W., **Feng-Yu Lin** and Yei-Cheih Huang (2003), “Diagnosis of Freeway Traffic Incidents with Chaos Theory,” Journal of the Eastern Asia Society for Transportation Studies, Vol. 5, pp. 2025-2035.
5. 藍武王、林豐裕 (2003), 「短期交通量變化：混沌特性之探索」，運輸計劃季刊，第三十二卷，第二期，頁 219-248。
6. 藍武王、林豐裕、郭怡雯 (2003), 「有限相空間模糊近傍差分法之混沌預測：以短期交通量預測為例」 中國土木水利工程學刊，第十五卷，第三期，頁 589-603。

B. 其他投稿論文 (Other refereed papers)

7. Tseng, Pin-Yi, Cheng-Min Feng and **Feng-Yu Lin** (2003), “The Analysis of Human and Vehicle Factors for Taiwan Freeway Traffic Accident,” Journal of the Eastern Asia Society for Transportation Studies, Vol. 5, pp. 2470-2482.
8. 曾平毅、林豐裕 (2002), 「路口安全評估模式之研究」，運輸學刊，第十四卷，第四期，頁 49-75。
9. Tseng, Pin Yi. and **Feng-Yu Lin** (2001), “A Fuzzy Integral Model for Measure of Intersection Safety,” Journal of the Eastern Asia Society for Transportation Studies, Vol. 4, no.5, pp. 261-274.

C. 研討會論文

10. Lan, Lawrence W., **Feng-Yu Lin** and Yun-Pang Wang (2003), “Self-organized Phenomenon and the Edge of Chaos in Traffic Flow Dynamics,” Proceedings of the Eastern Asia Society for Transportation Studies, Vol. 4, pp. 574-582.