





Technical Co-sponsor: IEEE Hong Kong Section Robotics and Automation/Control Systems Joint Chapter

## Jointly present

## **SEMINAR SERIES ON**

## CHAOS, CONTROL AND COMPLEX NETWORKS

Fridays, 1 Sept – 22 Dec 2006, 4:30 pm – 5:30 pm Room B6605 or G6302, City University of Hong Kong Or Room CD634, Hong Kong Polytechnic University (All presentations will be in English)

THE CENTRE FOR CHAOS AND COMPLEX NETWORKS at the City University of Hong Kong and the Department of Electronic and Information Engineering at the Hong Kong Polytechnic University continue their joint seminar series in this semester, to present tutorial overviews and original research work in the general areas of chaos and bifurcation, systems control, and their engineering applications. A list of tentative topics and schedule is as follows.

Prof. Yufan Zheng, Melbourne University, Australia 1 Sept Aggregation of Dynamical Agents in a Network (Venue: B6605, CityU, Chair: D. Ho) Miss Xia Zheng, Hong Kong Polytechnic University 8 Sept LDPC Decoder Built on Complex Networks (Venue: CD634, PolyU, Chair: F. Lau) 15 Sept Prof. John Hogan, University of Bristol, UK Impact Dynamics of Large Dimensional Systems (Venue: B6605, CityU, Chair: T. Chow) Dr David Walker, Hong Kong Polytechnic University 22 Sept Kalman Filters and Applications to Time Series (Venue: CD634, PolyU, Chair: M. Small) 29 Sept Mr Junfeng Sun, Hong Kong Polytechnic University Time-Frequency Analysis and Noise Reduction for Noisy Chaotic Time Series (Venue: B6605, CityU, Chair: W. Tang) 6 Oct Prof. Gerard Olivar Tost, Universidad Nacional de Columbia, Columbia Control of Systems through Non-Smooth Bifurcations (Venue: CD634, PolyU, Chair: M. Tse) 9 Oct Prof. Uri Shaked, Nanyang Technological University, Singapore (Mon) Robust H\_infinity Output-Feedback Control (Venue: G6302, CityU, Chair: ) 13 Oct Dr Fabiola Angulo, Universidad Nacional de Columbia, Columbia Fixed Point Induced Controller (FPIC): A New Technique for Controlling Chaos (Venue: B6605, CityU, Chair: R. Chen) 20 Oct Prof. Hao Ying, Wayne State University, USA Real-Time Fuzzy Logic Control of Mean Arterial Pressure in Postsurgical Patients in Intensive Care Unit (Venue: CD634, PolyU, Chair: F. Lau) 27 Oct Ms Kwok Wah Tang, City University of Hong Kong Chaos-Based Random Number Generators in Finite Precision Environment (Venue: B6605, CityU, Chair: K.W. Chung) 3 Nov Dr Raymond Lee, IATOPIA Technology Limited Chaotic Neural Network and Neural Oscillators (Venue: CD634, PolyU, Chair: M. Small) 10 Nov Dr K. Tim Ko, City University of Hong Kong Dimensioning of Hierarchical Wireless Networks (Venue: B6605, CityU, Chair: A. Leung) 17 Nov Prof. C.H. Woo, Hong Kong Polytechnic University The Ultimate Energy Solution - Build Our Own Sun! (Venue: CD634, PolyU, Chair: M. Tse) 24 Nov Dr C.W. Sham, Hong Kong Polytechnic University Optimal Cell Flipping in Placement and Floorplanning (Venue: B6605, CityU, Chair: K.W. Wong) 1 Dec Dr Thomas Wong, Hong Kong Polytechnic University Fast-Polarization-Hopping Transmit-Diversity to Mitigate Prolonged Deep Fades in Indoor Wireless Communications (Venue: CD634, PolyU, Chair: F. Lau) 8 Dec Mr Chengqing Li, City University of Hong Kong Why and How Cryptanalysis Works (Venue: B6605, CityU, Chair: R. Chen) 15 Dec Dr Yoshifumi Nishio, Tokushima University, Japan Synchronization Phenomena in Coupled Oscillatory Circuits (Venue: CD634, PolyU, Chair: M. Tse)

Chaos from the Statistical Point of View (Venue: B6605, CityU, Chair: R. Chen)

Prof. Jiu Ding, University of Southern Mississippi, USA

22 Dec