



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

*Jointly present*

**SEMINAR SERIES ON**  
**CHAOS AND SYSTEMS CONTROL**  
**Fridays, 21 January – 6 May 2005, 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 CONTROL AND SYNCHRONIZATION 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.

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| 11 January<br>(Tuesday) | Guoxiang Gu, Louisiana State University, USA<br><i>Optimum cooperative UAV sensing based on Cramer-Rao bound</i> (Venue: <b>G6302</b> , <b>CityU</b> )   |
| 17 January<br>(Monday)  | B. Larry Li, University of California at Riverside, USA<br><i>Spatiotemporal complexity and dynamic regimes of biological invasion: A predator-prey system with the Allee effect</i> (Venue: <b>G6605</b> , <b>CityU</b> ) |
| 21 January              | Zhong Zhang, CityU<br><i>Design and implementation of a chaotic mixer</i> (Venue: <b>CD634</b> , <b>PolyU</b> )  |
| 28 January              | Wenlian Lu, Fudan University<br><i>Geometric analysis of synchronization space for linearly coupled systems</i> (Venue: <b>B6605</b> , <b>CityU</b> )  |
| 4 February              | Dong Dai, PolyU<br><i>Horseshoes in power electronics</i> (Venue: <b>CD634</b> , <b>PolyU</b> )  |
| 11 February             | <b>Public Holiday</b>  |
| 18 February             | Yi Li, CityU<br><i>A Smith predictor-based PI-controller for AQM</i> (Venue: <b>G6302</b> , <b>CityU</b> )   |
| 25 February             | Alfonso Albano, Bryn Mawr College, USA<br><i>Mutual information tracks dynamical changes in sleep EEG</i> (Venue: <b>CD634</b> , <b>PolyU</b> )  |
| 4 March                 | Tongwen Chen, University of Alberta, Canada<br><i>Network based control systems</i> (Venue: <b>B6605</b> , <b>CityU</b> )  |
| 11 March                | Michael Small, PolyU<br><i>Surrogate data surrogates for models</i> (Venue: <b>CD634</b> , <b>PolyU</b> )  |
| 18 March                | Ying-Cheng Lai, USA<br><i>Synchronization in complex networks</i> (Venue: <b>B6605</b> , <b>CityU</b> )  |
| 25 March                | <b>Public Holiday</b>  |
| 1 April                 | Federico Ignacio Robbio, Universidad Nacional del Sur, Argentina<br><i>Harmonic distortion and Hopf bifurcations</i> (Venue: <b>CD634</b> , <b>PolyU</b> )   |
| 8 April                 | Yongxiang Xia, PolyU<br><i>Scale-free user network approach to telephone network traffic analysis</i> (Venue: <b>G6302</b> , <b>CityU</b> )  |
| 15 April                | Zhengping Fan, CityU<br><i>Complex network model of the Internet</i> (Venue: <b>CD634</b> , <b>PolyU</b> )   |
| 22 April                | Daniel Ho, CityU<br><i>Estimator for nonlinear descriptor systems with application to sensor fault diagnosis</i> (Venue: <b>B6605</b> , <b>CityU</b> )   |
| 29 April                | Long Min, South China University of Technology<br><i>The unpredictability of chaos</i> (Venue: <b>CD634</b> , <b>PolyU</b> )   |
| 6 May                   | Geng Zhao, Beijing Electronic and Technology Institute<br><i>Identity certification and cipher synchronization in speech information hiding</i> (Venue: <b>B6605</b> , <b>CityU</b> )                                      |