

# SHANGHAI INTERNATIONAL SYMPOSIUM ON NONLINEAR SCIENCE AND APPLICATIONS

( *Shanghai NSA'03, November 9 – 13, 2003* )

## *Call for Paper*

We are glad to announce that **Shanghai International Symposium on Nonlinear Science and Application – 2003 (Shanghai NSA'03)** will be held on Nov. 9-13, 2003 at Ocean Hotel in Shanghai after a delay due to the breaking out of SARS in China. Now SARS is under well control in China. WHO announced on June 24 that WHO had canceled its warning for traveling to Beijing – the last city in the mainland of China, and Beijing now is also not in the list of SARS infected areas again. Thus, people can travel all over China safely now. Even in the worst days, Shanghai has always been lucky. No people were really infected in Shanghai (except one who is the father of a patient coming back from southern China and was infected there). No doctors and nurses were infected in Shanghai. The total number of SARS patients were 8. There is no identified patient or suspect now. The government has taken rigorous measures to prevent any possibility of the rebound of this disease. Therefore, we have every reason to expect that in November there is no risk in Shanghai. Therefore, we are expecting that more people will join our symposium.

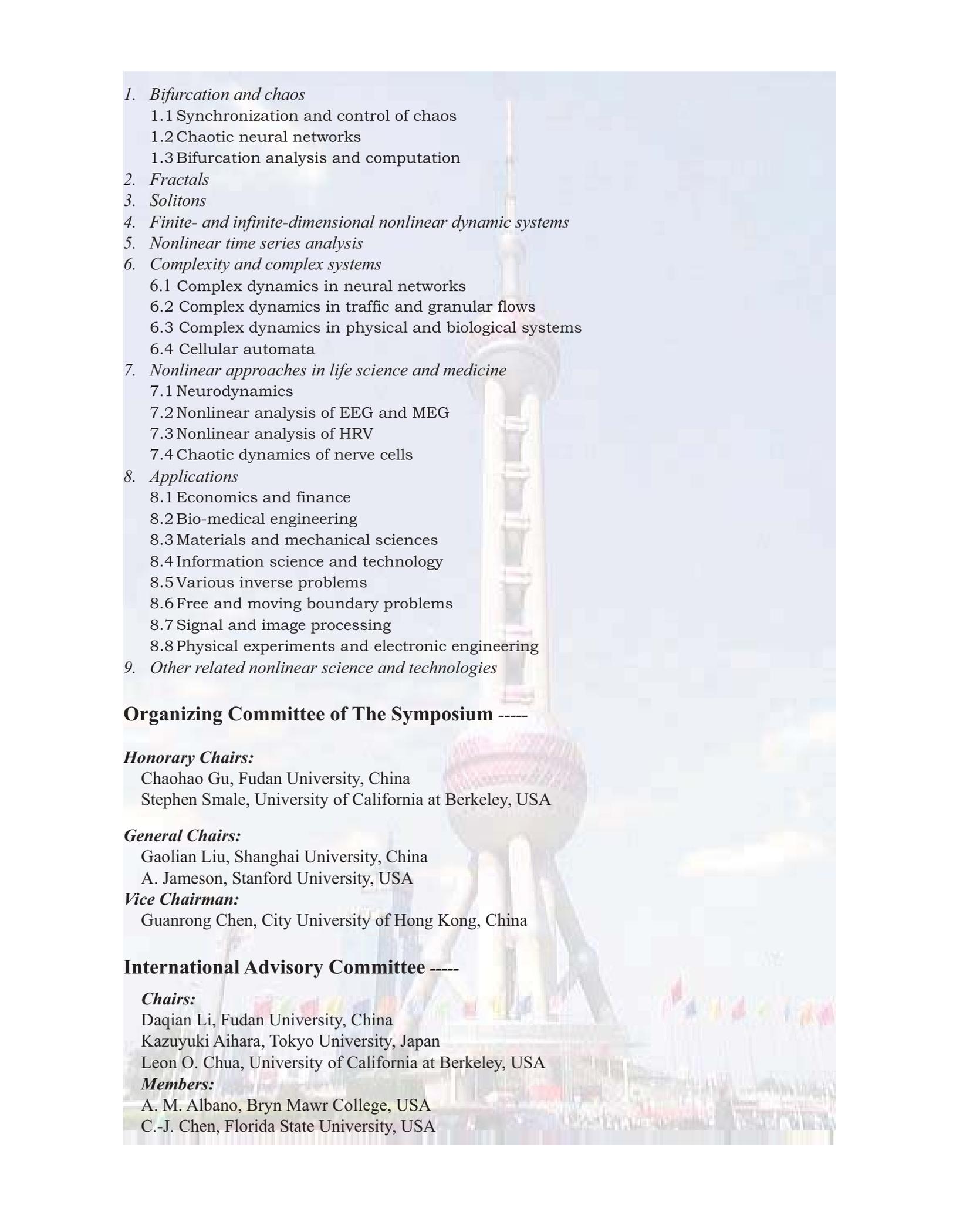
The Shanghai International Symposium on Nonlinear Science and Applications (*Shanghai NSA'03*) will be held in Ocean Hotel, Shanghai, China, on Nov. 9-13, 2003. Shanghai NSA'03 is sponsored by the Shanghai Society for Nonlinear Science, Shanghai Association for Science and Technology, Commission of Science and Technology of Shanghai Municipality and the Shanghai Center for Nonlinear Science, organized by the Research Center for Nonlinear Science of Fudan University and the Shanghai Society of Biophysics, and supported by National Science Foundation of China, and Center for Chaos Control and Synchronization of City University of Hong Kong.

Nonlinear science is one of the focusing research fields and most active scientific frontier in the new century, and Shanghai NSA'03 is devoted to this important area of scientific research. The theme of the symposium is intended to be broad enough so as to cover most of the directions in nonlinear science, with the aim of promoting wide interactions among researchers from different academic disciplines who are interested in nonlinear science and related technologies. The symposium will provide both experts and new comers from different research backgrounds with an excellent opportunity to review the latest progress and development in the field of nonlinear science, and to exchange their experience, progress, and ideas. The symposium will consist of three and a half-day oral and poster presentations, and a half-day tour of the city of Shanghai.

A few renowned leading scientists in this field will be giving keynote speeches in the symposium.

### **Topics:**

Mathematical theory, physical experiment, engineering design, biological study, and their various applications are included in the main program of the symposium. Topics include but are not limited to the following:

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1. *Bifurcation and chaos*
    - 1.1 Synchronization and control of chaos
    - 1.2 Chaotic neural networks
    - 1.3 Bifurcation analysis and computation
  2. *Fractals*
  3. *Solitons*
  4. *Finite- and infinite-dimensional nonlinear dynamic systems*
  5. *Nonlinear time series analysis*
  6. *Complexity and complex systems*
    - 6.1 Complex dynamics in neural networks
    - 6.2 Complex dynamics in traffic and granular flows
    - 6.3 Complex dynamics in physical and biological systems
    - 6.4 Cellular automata
  7. *Nonlinear approaches in life science and medicine*
    - 7.1 Neurodynamics
    - 7.2 Nonlinear analysis of EEG and MEG
    - 7.3 Nonlinear analysis of HRV
    - 7.4 Chaotic dynamics of nerve cells
  8. *Applications*
    - 8.1 Economics and finance
    - 8.2 Bio-medical engineering
    - 8.3 Materials and mechanical sciences
    - 8.4 Information science and technology
    - 8.5 Various inverse problems
    - 8.6 Free and moving boundary problems
    - 8.7 Signal and image processing
    - 8.8 Physical experiments and electronic engineering
  9. *Other related nonlinear science and technologies*

## **Organizing Committee of The Symposium -----**

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### **Important Deadline:**

**August 15, 2003 Submission of detailed abstracts and proposal for special session**

**September 1, 2003 Notification of paper acceptance**

**September 15, 2003 Advanced registration, hotel reservation and paper submission in electronic version.**

### **Notices:**

Proposals of organizing mini-symposiums or special sessions are welcome and encouraged, in which information about the organizers, topics, and estimated numbers of speakers should be indicated .

Detailed abstracts of papers should include the following sections: 1) Objective of the research; 2) Novelty of the work; 3) Methods and techniques; 4) Main results; 5) Conclusions. A format of the abstract will be attached at the end of this announcement.

All the submissions should indicate their categories clearly.

### **Instructions for Detailed Abstract:**

- (1) Detailed abstracts of papers should include the following sections: 1) Objective of the research; 2) Novelty of the work; 3) Methods and techniques; 4) Main results; 5) Conclusions.
- (2) Detailed abstracts should not be longer than two A4 pages, but should be detailed enough so that referees can judge if this work is interesting enough to be presented in the symposium. It is strongly suggested that the abstract can be printed within one A4 page.
- (3) Detailed abstracts should be typed in Word format, single spaced, so that it could be easily edited to be published in the abstract book.
- (4) The title of the abstract should be typed in bold face letters (size 14, Times New Roman font), the text should be typed with Times New Roman font (size 10.5), 2.5 cm margin should be left both on the top and bottom, and 3 cm margin should be left both on the right and left.
- (5) The mailing address for every author should be noted clearly, so that the organizing committee can mail her/him invitation letter easily. At least one of the author's e-mail address should be noted.
- (6) No more than 3 references should be listed at the end of the abstract.

### **Venue:**

Shanghai NSA'03 will be held in the Ocean Hotel Shanghai (1171 Dong Da Ming Road, Shanghai 200082, Tel: +86-21-65458888, Fax: +86-21-65458993), a four-star hotel conveniently