

**The Third International Conference on  
Dynamics, Vibration and Control  
12-14 May 2010  
(ICDVC-2010)  
Hangzhou, China**

<http://saa.zju.edu.cn/icdvc2010>

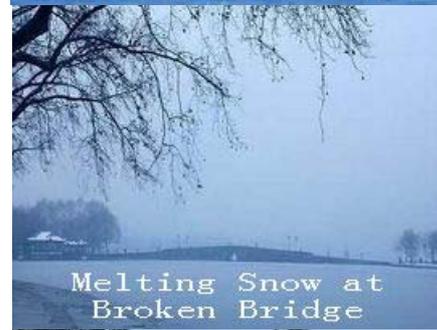
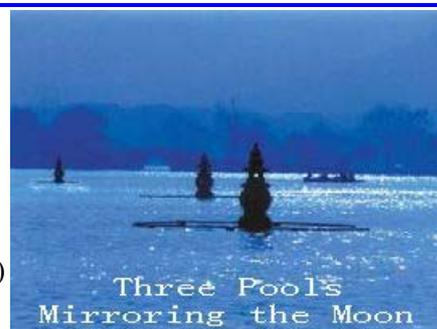
**The First Announcement and Call for Papers**

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Xi'an Jiaotong University  
Zhejiang University



## Aims and Scope

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Dynamics, vibration and control are among the most active scientific frontiers in sciences and engineering in recent years, and ICDVC-2010 is devoted to this important research areas.

The aim of ICDVC-2010 is to bring together the international leading scientists of dynamics, vibration and control communities, both theoreticians and experimentalists, and to present their original research work of very high quality. The themes of the conference are intended to be broad enough so as to cover most of the directions in dynamics, vibration and control, promoting wide interactions among different academic disciplines. Mathematical theory, numerical simulation, physical experiments, engineering design, information technique, biological and financial studies, and their various applications are included in the main program of the conference. The conference also provides an excellent opportunity to researchers from different fields of science and engineering, both experts and new comers, for sharing ideas, experience and progress, and exploring new directions and problems among specialists in these fascinating areas of science and technology in the 21st century.

## Chairmen

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<b>W.Q. Zhu</b>	Zhejiang University, China
<b>L.O. Chua</b>	University of California, Berkeley, USA

## Co-Chairmen

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<b>K. Aihara</b>	University of Tokyo, Japan
<b>G.R. Chen</b>	City University of Hong Kong, China
<b>S.J. Hogan</b>	University of Bristol, UK
<b>G.A. Leonov</b>	St. Petersburg State University, Russia

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<b>M. di Bernardo</b>	University of Naples, Italy
<b>S. Celikovsky</b>	Czech Academy of Sciences, Czech

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<b>K. Yoshikawa</b>	University of Kyoto, Japan
<b>M.P. Yushkov</b>	St. Petersburg University, Russia

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<b>J.C. Zhang</b>	Academia Sinica, Taiwan, China
<b>W.D. Zhu</b>	University of Maryland at Baltimore County, USA
<b>Z. Zhusubaliyev</b>	Kursk State Technical University, Russia
<b>J.W. Zu</b>	University of Toronto, Canada

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<b>R.H. Huan</b>	Zhejiang University, China
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<b>Z.L. Huang</b>	Zhejiang University, China
<b>M. Ye</b>	Zhejiang University, China
<b>Z.G. Ying</b>	Zhejiang University, China

## Keynote Lectures

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<b>K. Aihara</b>	University of Tokyo, Japan
<b>G.R. Chen</b>	City University of Hong Kong, China
<b>L.O. Chua</b>	University of California, Berkeley, USA
<b>H.Y. Hu</b>	Beijing Institute of Technology, China
<b>J. Kurths</b>	University of Potsdam, Germany
<b>G.A. Leonov</b>	St. Petersburg State University, Russia
<b>Q.S. Lu</b>	Beijing University of Aeronautic and Astronautics, China
<b>M. Wiercigroch</b>	University of Aberdeen, UK

## Topic of the Conference

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### 1. Nonlinear Dynamics of Discrete and Continuous Systems

General Theory and Numerical Methods of Bifurcation and Chaos  
Bifurcation and Chaos in Hamiltonian Systems  
Dynamics of Non-smooth Systems  
Dynamics of Time-delay Systems  
Dynamics of Stochastic Systems  
Pattern Formation and Complex Systems  
Control of Bifurcations and Chaos  
Synchronization of Chaotic Systems

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### 2. Mechanical Vibration and Control

Free and Excited Vibrations in Linear or Nonlinear Structures and Machinery  
Collision or/and Friction Induced Vibrations  
Random Vibration and Control  
Vibration and Control of Mech-electrical Coupled Systems  
Vibration and Control of Rotor Systems

**3. Control Theory and Application**

Adaptive and Optimal Control  
Control of Distributed Parameter Systems  
Nonlinear Control  
Stochastic Control  
Robust Control

**4. Dynamics and Control in Multi-body Systems**

Theory and Computation of Dynamics and Control in Multi-body Systems  
Contact and Impact Problems in Multi-body Systems  
Numerical Simulation and Experiment Research  
Engineering Applications

**5. Analytical Dynamics**

Hamiltonian Dynamics and Birkhoffian Dynamics  
Dynamics with Holonomic and Nonholonomic Constraints  
Symmetry and Conservation  
Mathematical Methods in Dynamics

**6. Dynamics in Engineering, Biology, Economy and Other Related Fields**

Neurodynamics  
Dynamics in Ecology, Epidemic and Environmental Sciences  
Dynamics of Biological Systems  
Dynamics and Control of Complex networks  
Economy and Finance Dynamics  
Dynamic Signal Processing, Monitoring and Diagnostics in Engineering Systems  
Dynamics and Vibration of Micro-Systems and Micro-Structures  
Dynamics Analysis in Nano- Systems  
Dynamics of Railroad Vehicles and Transportation Systems  
Spacecraft Dynamics and Control

**Proceedings and Special Issues**

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The extended abstracts will be published in the Conference Proceedings with CD-ROM. A number of selected full papers will be recommended to publish in the following international journals after the conference:

- 1 International Journal of Bifurcation and Chaos;
- 2 Journal of Sound and Vibration;
- 3 Science in China E, G;
- 4 International Journal of Non-Linear Mechanics.

**Abstract Submission**

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The abstract should include the following contents:

- 1) Corresponding author and his address;
- 2) Objective and novelty of the research;
- 3) Methods and techniques;
- 4) Main results;
- 5) Conclusions;

6) Main references.

**A template of the extended abstract is available for download as Microsoft WORD file in the following address:**

**[http://saa.zju.edu.cn/icdvc2010/upload/2009/3/Abstract\\_Sample.doc](http://saa.zju.edu.cn/icdvc2010/upload/2009/3/Abstract_Sample.doc)**

**Please submit your extended abstract by e-mail as attachments in MS-WORD format to secretary Ms. W.W. Huang at**

**[weiqiuzhu@zju.edu.cn](mailto:weiqiuzhu@zju.edu.cn)**

**before September 30, 2009**

After reviewed by the scientific committee, the acceptance of all abstracts will be notified to the corresponding author, and **revised extended abstract or full papers should be sent to secretary Ms. W.W. Huang at [weiqiuzhu@zju.edu.cn](mailto:weiqiuzhu@zju.edu.cn)** for publication of the Conference Proceedings before **February 28, 2010**. Some selected papers will be further recommended for publication in international peer-reviewed journals.

## **Mini-symposia Proposals**

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Proposals of organizing special mini-symposia are welcome and encouraged, in which the following information should be indicated: title of the mini-symposium; name, affiliation, mailing address and e-mail address of the proposer(s); description of the topic of the mini-symposium (not exceeding 100 words); estimated numbers of speakers. The deadline for mini-symposia proposal submission is **May 31, 2009**. Please send your proposal to **Prof. W.Q. Zhu at [wqzhu@yahoo.com](mailto:wqzhu@yahoo.com)**

## **Location**

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The conference will be held in Hangzhou. Hangzhou is one of the most beautiful cities in China, one of the seven ancient capitals in the Chinese history, and full of cultural heritages. It is also known as the Town of Fish and Rice, House of Silk, Capital of Tea, and therefore the Paradise of the Earth. Hangzhou is located on the east coast of China, about 200 kilometers southwest of Shanghai. It can easily reached by air from Shanghai, Beijing or Hong Kong, or by train or car from Shanghai. For the travel and tourist information, please see **<http://saa.zju.edu.cn/icdvc2010>**.

## **Social Program**

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The social program is open to all registered participants and registered accompanying persons. Post-conference tours will be arranged by a travel agency. Detailed information will be announced in the second circular.

## **Pre-registration**

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**Please download the pre-registration form in the following address:**

**[http://saa.zju.edu.cn/icdvc2010/upload/2009/3/Pre\\_registration\\_Form.doc](http://saa.zju.edu.cn/icdvc2010/upload/2009/3/Pre_registration_Form.doc)**

**Please submit your pre-registration form to secretary Ms. W.W. Huang at**

**[weiqiuzhu@zju.edu.cn](mailto:weiqiuzhu@zju.edu.cn)**

**before September 30, 2009**

## **Important Dates**

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May 31, 2009	Mini-symposium proposal submission
September 30, 2009	Pre-registration, Extended abstract submission
December 31, 2009	Notification of acceptance
February. 28, 2010	Revised extend abstract or full paper submission

## **Contact Information**

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Inquiries, suggestions and comments are welcome. Please send them to the secretary:

**Ms. W.W. Huang**     [weiqiuzhu@zju.edu.cn](mailto:weiqiuzhu@zju.edu.cn)