FIRST INTERNATIONAL WORKSHOP ON NONLINEAR DYNAMICS AND SYNCHRONIZATION

INDS'08

JULY 18-19, 2008 (KLAGENFURT, AUSTRIA)
http://inds08.uni-klu.ac.at

General Chair:
K. Kyamakya (Austria)
Program Co-Chairs:
W. Halang (Germany)
G. Chen (Hongkong)
D. Ruan (Belgium)
N. Rulkov (USA)
Organization Chairs:
Z. Li (Germany)
J. C. Chedjou (Austria)
A. Bouchachia (Austria)

Key Note Speakers

G. Chen, City Univ. of Hong Kong, Hong Kong
L.O. Chua, University of California, USA
J. Kacprzyk, Polish Academy of Sciences, Poland
D. Ruan, Belgian Nuclear Research Centre, Belgium
W. Mathis, University of Hannover, Germany
D. Helbing, ETH Zürich, Switzerland
N. Rulkov, University of California, USA
M. C. Mackey, McGill University, Canada

Important dates

Extended abstract submission: **28.02.2008**
Acceptance letter: **15.04.2008**
Full paper submission: **30.04.2008**
Early registration deadline: **25.05.2008**

Technical Program Committee (tentative)

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S. Elaydi (USA)
T.C. Kofane (Cameroon)
C. M. Takenga (Germany)
H. Leung (Canada)
D. Cheng (China)
Y. Hong (China)
M. Ding (USA)
P. Siarry (France)
J. Gallas (Germany)
G. Casati (Italy)
V.Romanovski (Slovenia)
K. Umeno (Japan)
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M. Marhl (Slovenia)
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L. Kocarev (USA)
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J. Suykens (Belgium)
M.Voicu (Romania)
M. C. Mackey (Canada)
C. Muravchik (Argentina)
M. Cencini (Italy)
F. Izrailev (Mexico)
G.V. Osipov (Russia)
D. Aeyels (Belgium)
P. Arena (Italy)
M. Frasca (Italy)
L. Patanè (Italy)
G. Vagliasindi (Italy)
P. Woafo (Cameroon)
L. Fortuna (Italy)
V. D. Shalfeev (Russia)
M. Dotoli (Italy)
M. Robnik (Slovenia)

The First International Workshop on Nonlinear Dynamics and Synchronization (INDS'08) is a two-day international workshop bringing together international researchers, developers and practitioners from different horizons to discuss the latest advances in nonlinear dynamics and synchronization. INDS'08 will serve as a forum to present current and future works as well as to exchange research ideas pertaining to various aspects in this field of nonlinear dynamic systems and synchronization. INDS'08 will feature contributed as well as invited papers and will include poster and demo sessions.

The major focus of this inter-disciplinary workshop lies on the following areas:

- **Theoretical fundamentals of synchronization**
- **Nonlinear systems and synchronization**
- **Experiments of nonlinear dynamics and synchronization**
- **Simulation of nonlinear dynamics and synchronization**
- **Applications of nonlinear dynamics and synchronization**:
  - **Self-organized traffic management systems**
  - **Self-organized intelligent supply chains and logistics systems**
  - **Cybernetics**
  - **Systems control**
  - **Robotics**
  - **Cooperative advanced driver assistance systems**
  - **Pattern recognition**
  - **Computational intelligence models (soft computing and machine learning)**
  - **Cellular neural networks and applications**
  - **Image processing (incl. scene analysis)**
  - **Signal processing (incl. speech processing and recognition)**
  - **Self-reconfigurable systems**
  - **Self-healing systems**
  - **Self-testing systems**
  - **Coupled oscillatory systems**
  - **Bio-computing, Neuro-computing, Biology, Bio-chemistry**
  - **Chaos control**
  - **Communication (wired and wireless), networking and sensor networks**
  - **Cryptography and security**
  - **Social sciences, psychology, business and management**

Submission of papers: Researchers are invited to submit an extended abstract (min. 3-4 pages) before **28.02.2008**. After review and acceptance of the extended abstracts authors will be invited to submit a 6-8 page full paper version. Please see **important dates** for more information.
EDAS link for abstract/paper submissions: http://edas.info/6155

Camera-ready full papers will be included in the workshop proceedings, which will be published by "Shaker Verlag" (Germany) and distributed to the participants at the workshop.

Post-Conference publications: The best contributions, based upon the quality, novelty and relevancy, will be invited to submit a longer paper (10-14 pages). After undergoing a thorough review process selected papers will be published in two *books* (one with Springer and the second with World Scientific Publisher). Moreover two special issues of journals are also planned: one with "*The Open Cybernetics and Systemics Journal*" published by Bentham publishing, and the second with the "*International Journal of Computational Intelligence System*s", published by Atlantis Press. The first special issue will be on "Nonlinear Dynamics, Synchronization, and Applications". The second special issue will select 7 papers related to soft computing issues/applications in the context of nonlinear dynamics and synchronization.

The organization committee is working hard to make INDS'08 a truly memorable experience for all participants.