Speakers from abroad

Ali Alpar
(Sabanci University)

Saber Elaydi
(Trinity University)

Toshiaki Imada
(University of Washington)

David Pines
(UC Davis and Los Alamos National Laboratory)

Joyce Tsunoda
(University of Hawai'i and Hakuo University)

James Yorke
(University of Maryland)
## Interdisciplinary Conference on the Sciences of Complexity and Science Education

**Date**: June 16 and 17, 2007  
**Place**: Centennial Hall  
(Admission Free)

- Organized by Institute of Economic Research, COE Program "Interfaces for Advanced Economic Analysis," and The Integrated Economic Research Foundation, Kyoto University  
- The auspices by International Society for Education and The Japan Kanji Aptitude Testing Foundation

### June 16 (Sat.) Sciences of Complexity

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30~10:40</td>
<td>Opening Speech</td>
</tr>
</tbody>
</table>
| 10:40~11:30 | Chair: Nobuyuki Tose (Keio University)  
James Yorke (University of Maryland)  
"Chaos: Origins and Perspectives" |
| 11:30~12:20 | Chair: Jun Sekine (Kyoto University)  
Yoichiro Takahashi (Kyoto University)  
"Large Deviation Principle for Dynamical Systems" |
| 12:20~13:50 | Lunch                                                                   |
| 13:50~14:40 | Chair: Seiji Nakagawa  
(National Institute of Advanced Industrial Science and Technology)  
Toshiaki Imada (University of Washington)  
Patricia K. Kuhl  
"Cutting-edge Neuroimaging Technology: Language Functions from Infants to Adults" |
| 14:40~15:30 | Chair: Mitsuo Tonoike (Chiba University)  
Yoshikazu Tobinaga (Elegaphy, Inc.)  
"Non-invasive Brain Measurement of Individual Thinking" |
| 15:30~15:50 | Break                                                                   |
| 15:50~16:40 | Chair: Tadashi Yagi (Doshisha University)  
Makoto Yano (Kyoto University)  
"Intergenerational Transfer and Altruism" |
| 16:40~17:30 | Chair: Masao Ninomiya (Kyoto University)  
Makoto Yao (Kyoto University)  
"Bridges between Microscopic and Macroscopic Physics" |
| 17:30~18:20 | Chair: Satoru Nakatsuji  
(University of Tokyo)  
David Pines  
(UC Davis and Los Alamos National Laboratory)  
"The Emergent Universe: From Quantum Matter to Social Behavior" |

### June 17 (Sun.) Science Education

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 10:30~11:20 | Chair: Alain Venditti (GREQAM)  
Kazuo Nishimura (Kyoto University)  
"Power of Self-Learning Method and Complex Economic Systems" |
| 11:20~12:10 | Chair: Haruhiko Funahashi  
(Osaka Electro-Communication University)  
Ali Alpar (Sabanci University)  
"Emerging Needs and Patterns in Education: the University Courses Curriculum at Sabanci University" |
| 12:10~13:40 | Lunch                                                                   |
| 13:40~14:30 | Chair: Fujio Ohmori (Kumamoto University)  
Tomoe Fujimoto (Tomoe Soroban Inc.)  
Hideki Okada (Matsushita Electric Industrial Co., Ltd.)  
"Exhibition: Soroban and Mental Arithmetic Calculation" |
| 14:30~15:20 | Chair: Kiyotaka Doi (Hyogo University)  
Joyce Tsunoda  
(University of Hawaii and Hakuo University)  
"The Scholarship of Teaching and Learning in American Higher Education" |
| 15:20~15:40 | Break                                                                   |
| 15:40~16:30 | Chair: Yoshihiro Hamaya  
(Okayama University of Science)  
Saber Elyadi (Trinity University)  
"Mathematics and Life Sciences in Undergraduate Education: Pedagogy and Research" |
| 16:30~17:20 | Chair: Naoki Kuramoto (Tohoku University)  
Yasu to Morita (Tohoku University)  
"Mathematical Education and Entrance Examinations in Japan" |
| 17:20~18:10 | Chair: Nobuo Okada (Osaka University)  
David Sell (Nara Institute of Science and Technology)  
"Japan and the US: Pursuing Our Highest Values" |