Thursday, November 10

8:30  Registration

Room A

8:30-10:00  High-speed Image Sensing and Processing I

Chair: Shingo Kagami (Tohoku University) and Naoki Yokoyama (Tokai University)

8:30  4A-A01  Takashi Komuro  Saitama University  High-speed vision and its applications (Invited)

9:00  4A-A02  T. Masunari, K. Yamagami, M. Mizuno, S. Une, M. Udani, T. Kanematsu, K. Demachi, Y. Nakamura and S. Suzuki  Toyohashi University of Technology  Shuttlecock Detection System for Fully-Autonomous Badminton Robot with Two High-Speed Video Camera


10:00-10:15  Coffee Break

10:15-11:35  High-speed Image Sensing and Processing II

Chair: Takashi Komuro (Saitama University) and Shouren Huang (The University of Tokyo)

10:15  4A-A05  Shingo Kagami  Tohoku University  Image and Graphics Processing for Fast Projection Mapping onto a Moving Surface

10:35  4A-A06  Yoshihiro Watanabe  The University of Tokyo  High-speed 3D vision and its applications for real-world interaction

10:55  4A-A07  Naoki Yokoyama  Toyohashi University of Technology  GPU accelerated Motion Analysis Program for High-Speed Imaging

11:15  4A-A08  Yukimi Tateno  Gumma University  High resolution imaging of a subsonic projectile using automated mirrors with large aperture

11:40-12:00  Closing

12:00-13:00  Lunch (Izumi)

Room B

8:45-10:05  High-speed Imaging Tools I

Chair: Boleslaw Stasicki (DLR, German Aerospace Center) and Graham W. Smith (AWE, UK)


9:05  4B-A02  J Haworth, J S Milnes, Y Fisher, A. Jadwin, R Boni & P A Jaanimagi  Photek Ltd  The Development of a Streak Tube with Improved Time Resolution and Range

9:25  4B-A03  R. T. Paton, R. E. Hall, B. W. Skews  University of the Witwatersrand  A New Continuous Light Source for High-Speed Imaging
Thursday, Nov. 10

9:45 4B-A04 M. Kanzyuba, A. B. Berlizov, V. B. Lebedev, G. G. Feldman, and V. N. Krutikov
All-Russian Research Institute for Optical and Physical Measurements [VNIIOR]
Development of the Standard for Laser Pulse Duration in the Picosecond Range

10:05-10:30 Coffee Break

10:30-11:30 High-speed Imaging Tools II
Chair: Kinko Tsuji (Shimadzu Europa GmbH) and Alexander Rack (ESRF)

10:30 4B-A05 P. Mercier, P. A. Frugier, P. Chavel, M. Boustie, E. Lescoute, R. Ecault
CEA-DAM-DIF (Commissionat ? l’Energie Atomique)
Quantitative imaging approaches dedicated to shock-physics experiments

10:50 4B-A06 Kenji Ishikawa, Kohei Yatabe, Yusuke Ikeda, Yasuhiro Oikawa, Takashi Onuma, Hayato Niwa, Minoru Yoshii
Waseda University
Interferometric imaging of acoustical phenomena using high-speed polarization camera and 4-step parallel phase-shifting technique

11:10 4B-A07 Shouxian Liu, Li Yu, Li Zeren, Chen Guanghua, Peng Qixian, Lei Jiangbo, Liu Jun, Yuan Shuyun
Institute of Fluid Physics, China Academy of Engineering Physics
All-Optical Framing Photography Based on Hyperspectral Imaging Method

12:00-13:00 Lunch (Izumi)

Room C

8:45-9:55 Experimental Mechanics I
Chair: Shinichi Suzuki (Toyohashi University of Technology) and Motoharu Fujigaki (University of Fukui)

8:45 4C-A01 Alexander Rack, Margio Olbinado, Mario Scheel, Andreas N. Daneliewsky
ESRF
Depicting ultra-fast processes in real-time by direct and diffraction hard X-ray imaging (Invited)

9:15 4C-A02 T. Okinaka, L. Wijerathne
Kindai University
Experimental and Numerical Study on the Unstable Crack Growth under Uniaxial Compression

9:35 4C-A03 Hisashi Ishida, Sota Oshima, Takayuki Kusaka, Toma Takeda
Ritsumeikan University
Experimental Method for Determining Fracture Toughness

9:55-10:15 Coffee Break

10:15-11:35 Experimental Mechanics II
Chair: Takayuki Kusaka (Ritsumeikan University) and Tomoo Okinaka (Kindai University)

10:15 4C-A04 D. Yamamoto, S. Yoneyama, S. Suzuki
Toyohashi University of Technology
A Method to Measure Velocity Transition and Stress Intensity Factor of Propagating Cracks with High-speed Video Camera

10:35 4C-A05 M. Fujigaki, T. Yoshikawa, Y. Murata, T. Kondo
University of Fukui
Prototype of High-speed Measurement Camera for Fringe Pattern Analysis Method

10:55 4C-A06 Shuto Amahata, Kazuki Inagaki, Jun Koyanagi, Satoru Yoneyama
Aoyama Gakuin University
Evaluating Strain Rate Dependent Material Properties of Carbon Fiber Reinforced Polymer Using Split Hopkinson Pressure Bar

11:15 4C-A07 S. Aye and P. S. Heyns
University of Pretoria
Damage Detection and Failure Prediction using Proportional Hazard Methods

12:00-13:00 Lunch (Izumi)
**Room D**

**High-speed Imaging of Nuclear Fusion Plasmas I**

*Chair: Hiroyuki Shiraga (Osaka University) and Terance Hilsabeck (General Atomics)*

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
<th>Institution(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:45</td>
<td>4D-A03</td>
<td>H. Shiraga</td>
<td>Osaka University</td>
<td>Review of Concepts and Applications of Image Sampling on High-Speed Streak Cameras</td>
</tr>
</tbody>
</table>

**Coffee Break**

**High-speed Imaging of Nuclear Fusion Plasmas II**

*Chair: Hiroyuki Shiraga (Osaka University) and Terance Hilsabeck (General Atomics)*

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
<th>Institution(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30</td>
<td>4D-A04</td>
<td>S. Ohdachi and T. F. Ming, LHD Experiment Group</td>
<td>National Institute for Fusion Science, National Institutes of Natural Sciences</td>
<td>Imaging diagnostics for magnetohydrodynamic instabilities in magnetically confined fusion plasmas</td>
</tr>
<tr>
<td>11:10</td>
<td>4D-A06</td>
<td>Zeng Xuanke, Ci Yi, Xu Shixiang, Jingzhen Li</td>
<td>Shenzhen University</td>
<td>A New Femtosecond Framing Imaging with High Spatial Resolution</td>
</tr>
</tbody>
</table>

**Lunch (Izumi)**