## Special Sessions on HAM

### Lecture Room: 061

**Session 1:**
**Special session on Human Adaptive Mechatronics 1**

*Chair:* Yoshinori Uchikawa  
*Co-chair:* Masayasu Ito

10:00-10:20 Estimating multiple sources in somatosensory area to SEF of finger stimulus using SVD and time-frequency analysis (ID: 329)  
*Bong-Soo Kim and Yoshinori Uchikawa*  
*Tokyo Denki University*

10:20-10:40 A novel approach for Self-Localization based on Computer Vision and Artificial Marker Deposition (ID: 348)  
*Savan Chhaniyara, K. Althoefer and L. D. Seneviratne, Y. H. Zweiri*  
*King’s College London, University of Mutah*

10:40-11:00 Associative Memory for Noisy and Structurally Deformed Two-Dimensional Images Using Neural Networks (ID: 152)  
*Hiroshi Inaba, Tomoki Takahashi and Keylan Alimhan*  
*Tokyo Denki University*

11:00-11:20 Optimization and Control of a Pendulum-driven Cart System (ID: 193)  
*Yang Liu, Hongnian Yu, Brian Burrows*  
*Staffordshire University*

### Lecture Room: 061

**Session 1:**
**Special session on Human Adaptive Mechatronics 2**

*Chair:* Zhao-Hui Jiang  
*Co-Chair:* Kaspar Althoefer

*Carolina Chang, Robin R Murphy*  
*Universidad Simón Bolívar, University of South Florida*

13:50-14:10 Unstable Object Stabilization and Control Using a DD Robot Manipulator (ID: 332)
<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:10-14:30</td>
<td>Dynamic Analysis and Traversability Prediction of Tracked Vehicles on Soft Terrain (ID: 177)</td>
<td>Zhao-Hui Jiang and Kouya Kamise</td>
<td>Hiroshima Institute of Technology</td>
</tr>
<tr>
<td>14:30-14:50</td>
<td>Ceiling Light Landmarks Based Localization and Motion Control for a Mobile Robot, (ID: 83)</td>
<td>Said Al-milli, Kaspar Althoefer, and Lakmal D. Seneviratne</td>
<td>King's College London</td>
</tr>
<tr>
<td>14:50-15:10</td>
<td>A Mechatronic System Design Case Study: Adaptive Modeling and Control of an Inverted Pendulum (ID 231)</td>
<td>Seyed Salahadin Mirsaeid Ghazi and Anahita Zarei</td>
<td>Iran University of Science and Technology</td>
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<tr>
<td>15:10-15:30</td>
<td>A calibration test of Stewart platform (ID: 350)</td>
<td>Yong Zhang and Feng Gao</td>
<td>Shanghai Jiaotong University</td>
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