

**Thursday, 9th March: 13:30—15:10**

**Room A Technical Track 1: Human Support and Super Human**

Chairs: Prof. Hiroshi Yoshizawa  
Dr. Yoshihiro Itaguchi

**RS-1-1 The Effect of Visual Feedback on Writing Slips**

Chiharu Yamada, Yoshihiro Itaguchi, Kazuyoshi Fukuzawa

**RS-1-2 Consideration of Effective Element about Motion Training with Robot**

Kazutaka Takemoto, Seiichiro Katsura, Yoshihiro Itaguchi, Hiroshi Yoshizawa,  
Kazuyoshi Fukuzawa

**RS-1-3 Evaluation of Human Force Sensation in Three Directions**

Yukako Tani, Seiichiro Katsura

**RS-1-4 An Integrated Physical-Learning Model of Physical Human-Robot Interactions: A Bikebot Riding Example**

Kuo Chen, Jingang Yi, Yizhai Zhang, Tao Liu

**RS-1-5 Spatio-temporal Integrated Design for Precise and Flexible Human Motion Reproduction**

Yuki Nagatsu, Seiichiro Katsura

**Thursday, 9th March: 15:30—17:30**

**Room A Technical Track 2: Innovative System Design**

Chairs: Prof. Jingang Yi  
Prof. Yasuhiro Kakinuma

**RS-2-1 Application of Robots for Advanced Data Measurement**

Hiroki Kurumatani, Seiichiro Katsura

**RS-2-2 Zero-Infinite System Designed Actuator for Motion/Robotic System**

Kazumasa Miura, Seiichiro Katsura

**RS-2-3 Evaluation of Shape Dependency of CaF<sub>2</sub> Optical Micro-cavity on Cavity Performance, Manufactured by Using Ultra-precision Cylindrical Turning**

Yuta Mizumoto, Hiroi Kangawa, Hiroki Itobe, Mika Fuchida, Takasumi Tanabe, Yasuhiro Kakinuma

**RS-2-4 Control of Heat Propagation Based on Distributed Parameter Model**

Yukiko Osawa, Seiichiro Katsura

**RS-2-5 Connectivity Design Considering Informational Reachability -Case Study: Multilateral Control-**

Tomoki Kono, Seiichiro Katsura

**RS-2-6 Connectivity Design and Control of Multi Agent Systems Based on Average/Torsional Mode**

Satoshi Nishimura, Seiichiro Katsura

**Friday, 10th March: 11:20—12:10**

**Hall**

**Teaser Presentation**

Chair: Prof. Seiichiro Katsura

- IS-1 Finding out Elements of Direct Mail Designs that Influence Purchase Decision Using Electroencephalogram and Eye-Tracking Information**  
Aiko Kishi, Yasue Mitsukura
- IS-2 Identification of Functional Activities in the Brain when Hearing Unpleasant Sounds Using Near Infra-Red Spectroscopy**  
Maoka Endo, Yasue Mitsukura
- IS-3 Tinnitus Detection and Distress Estimation Using Prefrontal Cortex Electroencephalogram**  
Masashi Matsuoka, Yasue Mitsukura
- IS-4 Solving Mathematical Problem is Effected by Directional Perception**  
Fumiya Nakai, Kazuyoshi Fukuzawa
- IS-5 Mere Controllability of Interface Modulates Perception of Reward Probability and Behavior in Gambling Task**  
Takumi Tanaka, Hideaki Kawabata
- IS-6 Construction of Interactive Spatial Augmented Reality for Three Dimensional Objects**  
Tomohiro Kaneda, Yasue Mitsukura, Nozomu Hamada
- IS-7 Dissimilar Metals Joint Production Based on Directed Energy Deposition**  
Keiichi Yamazaki, Ryo Koike, Yasuhiro Kakinuma, Tojiro Aoyama, Yohei Oda
- IS-8 Basic Study on Relation between Void Evolution and Tensile Strength in Direct Energy Deposition**  
Ryo Koike, Ryo Ashida, Yasuhiro Kakinuma, Tojiro Aoyama, Yohei Oda
- IS-9 Manipulator Control Considering Information and Physical Connection Based on Decentralized Control**  
Koya Nambo, Seiichiro Katsura
- IS-10 Flight Control of Quadrotor for Fire-Fighting by Throwing Fire-Extinguisher**  
Takahiro Yoshimoto, Masami Iwase, Yuuya Akahori, Yuuki Kimoto, Iori Yoshida, Fumito Naka, Shoshiro Hatakeyama
- IS-11 Bicycle Behavior Analysis Based on Precise Modeling**  
Tatsumasa Kumagai, Ryuma Hatano, Takuya Tani, Takayuki Wada, Masami Iwase
- IS-12 Contact Motion Control to Moving Object with Relaxing Impact Force**  
Hayato Maki, Seiichiro Katsura
- IS-13 Sound Modeling Considering Reflected Wave for Sound Field Control**  
Yukari Sakai, Seiichiro Katsura
- IS-14 Estimation of Heat Inflow without Thermal Interference Between Multiple Heat Sources**  
Yuji Kimura, Seiichiro Katsura

**Friday, 10th March: 13:30—15:10**

**Room A Technical Track 3: Abstraction Science and Engineering**

Chairs: Prof. Yasue Mitsukura  
Prof. Ryo Sudo

- RS-3-1 Development and Evaluation of Assistive Terminals for the Improvement of Functional Performance of the Elderly in a Variety of Life Centers**  
Jörg Güttler, Thomas Linner, Andreas Bittner, Anne Engler, Eva Schulze, Thomas Bock
- RS-3-2 The Aedes Aegypti Mosquito Detection Using Naïve Bayes Classification**  
Azlin Ahmad, Mohd Najib, Muhammad Afiq Haizi Suhaimi
- RS-3-3 Identifying Mental Workload Using EEG Frequency Power Features in One-Hertz Intervals**  
Yi Lin, Yasue Mitsukura
- RS-3-4 Design of an EEG-based Brain-Computer Interface Using Motor Imagery for Wheelchair Control**  
Philemon Roussel, Yasue Mitsukura
- RS-3-5 Multiscale Tissue Engineering for Liver Reconstruction**  
Ryo Sudo

**Friday, 10th March: 15:30—17:10**

**Room A Technical Track 4: Smart Robotics and Mechatronics**

Chairs: Dr. Eiichi Saito  
Dr. Hidetaka Morimitsu

- RS-4-1 Instantaneous Identification of Environment Considering Rotation Center of Impedance Plane for Adaptive Force Control**  
Issei Takeuchi, Seiichiro Katsura
- RS-4-2 Validation Index of Robot Control for Energy Saving**  
Ryuya Komatsu, Seiichiro Katsura
- RS-4-3 Parallel Turning with Unequal Pitch Angle for Chatter Avoidance**  
Yuki Yamada, Takashi Kadota, Shinya Sakata, Kenichi Nakanishi, Hayato Yoshioka, Norikazu Suzuki, Yasuhiro Kakinuma
- RS-4-4 Control of Robotic Biped Walkers under Foot Slip**  
Yoshitaka Abe, Kuo Chen, Mitja Trkov, Jingang Yi, Seiichiro Katsura
- RS-4-5 Compensation of Time Varying Delay for Real-Time Applications**  
Hiroki Murata, Seiichiro Katsura

**Friday, 10th March: 17:30—18:30**

**Room A Interactive Session**

Chairs: Prof. Masami Iwase  
Prof. Ryo Koike

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