

March 8th									
9:00-10:00		Room: 6th Bldg., 5th floor, 6-501							
PS2: Plenary Session: Prof. Asif Sabanovic Challenges in Motion Control Systems									
Break									
10:15-12:15	Room 1 (501)			Room 5 (401)			Room 4 (504)		
	IS4: Emerging technologies in motion control			TT6: Robotics 1			TT7: Haptics and network based control		
		Kazuhiro Yubai	Mie University		Toshiaki Tsuji (Yutaka Umemura)	Saitama University		Kenji Natori	Chiba University
		Ryogo Kubo	Keio University		Daisuke Yashiro	Mie University		Takahiro Mizoguchi	KAST
		Title	First Autor		Title	First Autor		Title	First Autor
	IS4-1	Equilibrium Motion Planning of Humanoid Climbing Robot under Constraints	Akira Shimada (Shibaura Institute of Technology)	TT6-1	Intelligent robot navigation for surveillance behavior – a remote based approach	Takayuki Oshima (University of Toyama)	TT7-1	Mechanical Admittance Control Based on Feedforward Compensation for Fine Realization of Impedance	Yusuke Asai (Nagaoka University of Technology)
	IS4-2	Deadbeat Feedforward Compensation with Frequency Shaping Available for Continuous Path Control	Noriaki Hirose (Toyota Central R&amp;D Labs., INC.)	TT6-2	Application of Deep Belief Neural Network for Robot Object Recognition and Grasping	Delowar Hossain (University of Toyama)	TT7-2	Modal Space Disturbance Decoupling Method for Bilateral Control	Yoshiyuki Kambara (Keio University)
	IS4-3	Adaptive Robot Formations using Multiobjective Evolution of Neural Controllers	Genci Capi (University of Toyama)	TT6-3	Control Performance and Stability Evaluation Based on Unfalsified Control for a Reconfigurable Robot	Ryota Isobe (Mie University)	TT7-3	Simulations of 2D Tactile Display Using Compact Solenoid Actuators	Sakahisa Nagai (Yokohama National University)
	IS4-4	The application of vibration suppression control method for servo products	Yasufumi Yoshiura (Yaskawa Electric Corporation)	TT6-4	Center of Mass State Based Control for Bipedal Robot	Kazuya Tamura (Yokohama national university)	TT7-4	A Performance Analysis of Distributed Control over Multi-hop Network using STOMA Switches	Yu Imai (Mie University)
	IS4-5	A holonomy-based motion planning approach for a second-order nonholonomic system	Masahide Ito (Aichi Prefectural University)	TT6-5	A human-like robot intelligent navigation in dynamic indoor environments	Hua Bin (University of Toyama)	TT7-5	Design of network-based control system in consideration of packet loss and time delay	Tooru Suhara (Shibaura Institute of Technology)
IS4-6	A Gear Servo Motor with Output Torque control and Sensing Capability	Kotaro Saito (ROBOTEC,Inc)	TT6-6	Trajectory Generation of Leg Motion with CoG Limitation of Swing leg for Reducing Yaw-Axis Torque on Biped Robot	Shin Uhara (Seikei University)	TT7-6	Modal Space Selection and Control in Bilateral Control under Time Delay	Satoshi Nishimura (Keio University)	
Break									
13:15-15:15	Room 1 (501)			Room 5 (401)			Room 2 & 3		
	IS5: High precision motion control			TT8: Robotics 2			V: Video and interactive session		
		Kazuaki Ito	National Institute of Technology, Toyota College		Yutaka Uchimura	Shibaura Institute of Technology		Masaki Shibata	Seikei University
		Hiroshi Fujimoto	The University of Tokyo		Seichiro Katsura	Keio University		Sho Sakaino	Saitama University
		Title	First Autor		Title	First Autor			
	IS5-1	Estimation Method of Unobservable Oscillations in Sampled-Data Positioning Systems	Takenori Atsumi (Chiba Institute of Technology)	TT8-1	Improvement of Rough Terrain Running Ability for Mobility Robot with In-Wheel Motor	Ryohei Sato (The University of Tokyo)			
	IS5-2	Comparison of Generation Method of Feedforward Input in Time and Frequency Domain for System with Unstable Zero	Takayuki Shiraishi (National Institute of Technology, Kagoshima College)	TT8-2	Experimental Study on Formation Variable Form Swarm Robot System by Environment Recognition	Toshiki Midorikawa (National Institute of Technology, Gunma College)			
	IS5-3	Initial Friction Compensation for Suppressing Response Dispersion in Micrometer Stroke Positioning	Yoshihiro Maeda (Nagoya Institute of Technology)	TT8-3	Design and Development of a Mobile Rostrum Robot for University Convocation Ceremony in Malaysia	Dickson, Tze How Neoh (National Energy University, Malaysia)			
	IS5-4	Influence of the Nonlinear Friction Characteristics onto the Motion Behavior of Feed Drive Systems	Ryuta Sato (Kobe University)	TT8-4	Development of super multi-joint robot driven by single power source	Takashi Nagai (Shibaura Institute of Technology)			
	IS5-5	Parameter Design of Optical Lens Control System Using Limited Pole Placement Method	Yoshiyuki Urakawa (Sony Corporation)	TT8-5	Disturbance Observer With Variable Gain for Saving Energy of Robots	Ryuya Komatsu (Keio University)			
IS5-6	Retrospection on control-oriented case study of nonlinear elasticities in wave-motion gears	Michael Ruderman (University of Ager)	TT8-6	Bilateral Control Using Functional Electrical Stimulation Considering Muscle Length	Hiroto Mizoguchi (Saitama University)				
Break									
15:30-17:30	IS1: Haptics and its related technologies			TT9: Human support and rehabilitation systems					
		Yutaka Uchimura	Shibaura Institute of Technology		Tomoyuki Shimono	Yokohama National University			
		Takahiro Endo	Kyoto University		Hiroshi Igarashi	Tokyo Denki University			
		Title	First Autor		Title	First Autor			
	IS1-1	Bilateral Control of Single-Rotor Helicopter	Daisuke Yashiro (Mie University)	TT9-1	Force Sensorless Power Assist Control for Wheelchair on Flat Road Using Recursive Least Square with Multiple Forgetting	Xi Lele (The University of Tokyo)			
	IS1-2	Force Control of a Flexible Timoshenko Arm for Softness Display	Takahiro Endo (Kyoto University)	TT9-2	Assistive Control using Monocular Fisheye Camera for Power Assist Wheelchair	Takatoshi Okawa (Chitose Institute of Science and Technology)			
	IS1-3	A New Possibility of Bilateral Control –Functional Electrical Stimulation–	Sho Sakaino (Saitama University)	TT9-3	Quantitative Evaluation of Hemiplegic Ankle Spasticity Using Angular Velocity Control System with Torque Sensor and EMG	Satoshi Shibata (Mie University)			
	IS1-4	Tactile Display Using Ultrasonic Vibration	Masaya Takasaki (Saitama University)	TT9-4	Evaluation of Muscular Power Measurement Equipment of Lower Limbs to Measure Output Force Distribution	Yuki Mizutani (Mie University)			
	IS1-5	Transfer Function-based Approach for Designing Two-channel Bilateral Control Systems	Yasutaka Fujimoto (Yokohama National University)	TT9-5	A Robotic Cane for Walking Support Using Two Control Modes	Kyohei Shimizu (Yokohama National University)			
				TT9-6	Wearable Device for Postural Control using Control Moment Gyroscopes	Hiroki Ohya (Yokohama National University)			