ICM2015
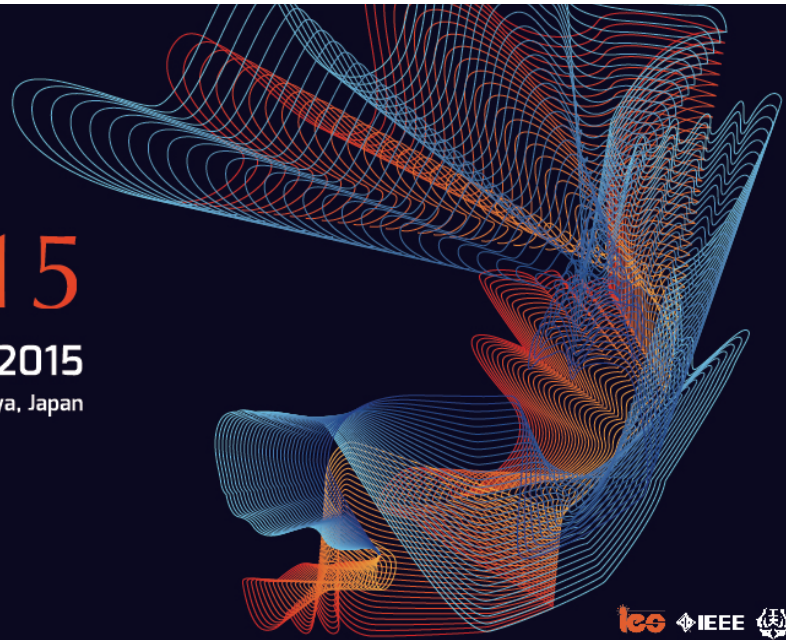**6 – 8 March 2015**
Nagoya Institute of Technology, Nagoya, Japan

Conference Program at A Glance

Friday March 6, 2015		
	Room A (#5211)	**Room B (#5221)**	**Room C (#5222)**
09:00-10:30	*Registration*		
10:30-12:30	SS-04 *Rehabilitation Mechatronics* *6 papers*	SS-01 *Smart Material Systems, Modeling, Control, Applications* *6 papers*	TT-01 *Mechatronic Systems* *4 papers*
	Lunch		
14:00-16:00	SS-03 *Legged Locomotion* *6 papers*	TT-02 *Robotics* *6 papers*	TT-03 *Motion Control* *6 papers*
	Coffee break		
16:30-16:40	*Opening ceremony at Room A (#5211)*		
16:40-18:30	*Panel discussion at Room A (#5211)*		
19:00-	*Banquet*		

Saturday March 7, 2015		
09:00-10:00	*Keynote lecture at Room A (#5211)*		
	Coffee break		
10:30-12:30	SS-06 *Real-World Haptics for Human Support* *6 papers*	SS-02-1 *Advanced Motion Control on Electric Vehicles and Sustainable Mobility 1* *6 papers*	TT-04 *Mechatronics and Robotics* *6 papers*
	Lunch		
13:30-15:30	SS-08 *Smart Precision Motion Control in Mechatronic Systems* *6 papers*	SS-02-2 *Advanced Motion Control on Electric Vehicles and Sustainable Mobility 2* *5 papers*	TT-05 *Control Theory* *5 papers*
	Coffee break		
16:00-18:00	SS-09 *Advanced Control Technologies for Nanoscale Servo Systems* *6 papers*	SS-10 *Electrical Machines and Drives for Automobile Applications* *6 papers*	TT-06 *Haptics* *6 papers*
18:30-	*Cocktail party*		

Sunday March 8, 2015		
09:30-12:00	SS-05 *Advanced Control Technologies Applied to Mechanical System* *7 papers*	SS-07 *Network-based Control Systems and Its Applications* *7 papers*	TT-07 *Sensing Technology* *5 papers*
	Lunch		
PM	*Technical tour*		

SS-04   **10:30-12:30 at Room A (#5211), Friday March 6, 2015**

Rehabilitation Mechatronics: session chairs, Noritaka Sato (Japan), Esam Hafez Abdelhameed Abdelgany (Egypt)

NF-001139	*Stability analysis of a non-linear adaptive impedance controller for rehabilitation purposes*	Roberto Oboe, Davide Pilastro
NF-000108	*Rehabilitation robot in primary walking pattern training for SCI patient -Training robot for home-use based on the experiments of the hospital-use type-*	Taisuke Sakaki, Toshihiko Shimokawa, Nobuhiro Ushimi, Koji Murakami, Yong-Kwun Lee, Kazuhiro Tsuruta, Kanta Aoki, Kaoru Fujiie, Ryuji Katamoto, Atsushi Sugyo
NF-001759	*Post-stroke robotic-assisted therapy Time-variant damping coefficient based control algorithm for isotonic exercise through circular motion*	Esam Abdelgany, Keita Kamada, Noritaka Sato, Yoshifumi Morita
NF-002089	*Development of an Upper Limb Rehabilitation Robot with Motion Guide Control by Pneumatic Artificial Muscles*	Toshiaki Tsuji, Shota Itoh, Sho Sakaino, Yuri Hasegawa
NF-001902	*Research of Training and Evaluation Aid Device with DOF Selective Constraint Mechanism for Hemiplegic Upper Limbs Rehabilitation*	Koutaro Taniguchi, Yong Yu, Tomokazu Noma, Ryota Hayashi, Shuji Matsumoto, Megumi Shimodozono, Kazumi Kawahira
NF-001406	*Improvement of Flexion/Extension Angle Range of KneeRobo to Replicate Involuntary Movements*	Noritaka Sato, Qichang Qi, Yoshie Maeda, Yoshifumi Morita, Hiroyuki Ukai, Kouji Sanaka

SS-01   **10:30-12:30 at Room B (#5221), Friday March 6, 2015**

Smart Material Systems, Modeling, Control, Applications: session chairs, Michael Ruderman (Japan), Daniele Davino (Italy)

NF-001856	*Application of Self-sensing Technique for Position Control Considering Vibration Suppression in Piezo-driven Stage*	Kenta Seki, Makoto Iwasaki
NF-002348	*2 Inputs - 2 Outputs Hysteresis Model For Piezoelectric Actuators*	Daniele Davino
NF-001082	*Comparison of Model-free and Model-based Control Techniques for a Positioning Actuator based on Magnetic Shape Memory Alloys*	Giulio Binetti, Giuseppe Leonetti, David Naso, Biagio Turchiano
NF-000604	*Extended Lumped Parameter Electromechanical Model of Piezoelectric Actuators*	Michael Ruderman, Yuki Kamiya, Makoto Iwasaki
NF-001651	*Self-Sensing in Dielectric Electro-Active Polymer Actuator Using Linear-In-Parametes Online Estimation*	Gianluca Rizzello, David Naso, Alexander York, Stefan Seelecke
NF-001627	*Online Identification of Piezoelectric Hysteresis by Direct Recursive Algorithm of Preisach Model*	Michael Ruderman, Dmitrii Rachinskii

TT-01   **10:30-12:30 at Room C (#5222), Friday March 6, 2015**

Mechatronic Systems: session chairs, Marcel Heertjes (Netherland), Susumu Hara (Japan)

NF-000167	*Offset-free Energy-optimal Model Predictive Control for Point-to-point Motions with high positioning accuracy*	Xin Wang, Jan Swevers
NF-002488	*Control System for High Precision Positioning Applications Based on Piezo Motors*	Tarik Uzunovic, Edin Golubovic, Dogancan Kebude, Asif Sabanovic
NF-000574	*Disturbance Suppression Method for Position-Sensorless Motion Control of DC Brushed Motor*	Yoshiyuki Kambara, Seiji Uozumi, Kouhei Ohnishi
NF-000515	*Model-based Temperature and Humidity Control of Paint Booth HVAC Systems*	Simon Alt, Oliver Sawodny

SS-03   **14:00-16:00 at Room A (#5211), Friday March 6, 2015**
Legged Locomotion: session chairs, Naoki Oda (Japan), Yasutaka Fujimoto (Japan)

NF-000973	*An Approach to Modeling and Evaluation Methods of Human Locomotion using IMU Sensors*	*Naohisa Kagami, Toshiyuki Murakami*
NF-001074	*Attitude Control of Quadruped Robot by Using Combination of Mono- and Bi-articular Muscles*	*Keisuke Ueda, Yuichi Sato, Toshimasa Miyazaki, Kiyoshi Ohishi*
NF-002151	*The Stable Wheeled Locomotion in Low Speed Region for a Wheel-Legged Mobile Robot*	*Kenta Nagano, Yasutaka Fujimoto*
NF-002305	*Inverse Kinematics with Knee Extension Walking Pattern for Bipedal Fast Walking*	*Hirokazu Mori, Chi Zhu*
NF-002119	*Recovery Control by using Visually Estimated Foot Sole Floating Angle for Biped Walking Robot*	*Naoki Oda, Kazushi Kushida, Mina Yamazaki*
NF-002313	*Variable compliance control with posture stabilization for biped robot*	*Keita Kusano, Muhammad Zharif, Yutaka Uchimura*

TT-02   **14:00-16:00 at Room B (#5221), Friday March 6, 2015**
Robotics: session chairs, Peter Xu (New Zealand), Daisuke Matsuka (Japan)

NF-001058	*Optimized Trajectory Planning for Mobile Robot in the Presence of Moving Obstacles*	*Chun-Hsu Ko, Kuu-Young Young, Yi-Hung Hsieh*
NF-001694	*Personal Robot Assisting Transportation to Support Active Human Life - Human-Following Method based on Model Predictive Control for Adjacency without Collision -*	*Noriaki Hirose, Ryosuke Tajima, Kazutoshi Sukigara*
NF-001899	*Gripper's Rotation of Five DoF Surgical Robot by Using Coordinate Transformation*	*Takuya Matsunaga, Guillaume Fau, Ryohei Kozuki, Kazuki Tanida, Kouhei Ohnishi*
NF-001945	*Qualitative Intelligent Control of Soft Robotic Peristaltic Sorting Tables*	*Martin Stommel, Weiliang Xu*
NF-001171	*Passivity-based Model Free Control of an Omnidirectional Mobile Robot*	*Chao Ren, Shugen Ma*
NF-002038	*Heavy-duty omni-directional Mecanum-wheeled robot for autonomous navigation system development and simulation realization*	*Li Xie, Christian Scheifele, Weiliang Xu, Karl A. Stol*

TT-03   **14:00-16:00 at Room C (#5222), Friday March 6, 2015**
Motion Control: session chairs, Michael Ruderman (Japan), Tomohiro Shibata (Japan)

NF-001953	*Virtual-Bilateral-Type Force Control for Stable and Quick Contact Motion*	*Takami Miyagi, Seiichiro Katsura*
NF-002399	*Force Sensorless Power Assist Control using Operation Force Observer for Nursing Lift*	*Masakazu Ishihara, Kazuaki Ito, Katsumi Inuzuka*
NF-000809	*A Novel Intention Prediction Strategy for a Shared Control Tele-manipulation System in Unknown Environments*	*Haitham El-Hussieny Hussien, Samy F. M. Assal, A. A. Abouelsoud, Said M. Megahed*

NF-001767	*Modulated Potential Field for Position Adjusting with Human Interaction for Implant Surgery*	*Koyo Yu, Tomohiro Nakano, Kouhei Ohnishi, Shin Usuda, Hiromasa Kawana, Taneaki Nakagawa*
NF-001686	*Consideration on Function Mode Design for Motion Construction*	*Seiji Uozumi, Koyo Yu, Kouhei Ohnishi*
NF-000779	*Synchronism Evaluation of Multi-DOF Motion-Copying System for Motion Training*	*Koichiro Nagata, Seiichiro Katsura*

SS-06   *10:30-12:30 at Room A (#5211), Saturday March 7, 2015*

Real-World Haptics for Human Support: session chairs, Seiichiro Katsura (Japan), Tomoyuki Shimono (Japan)

NF-000663	*Measurement of Complicated Quantity of Monitoring Area and Detection of High Active Part of Invasion Object in Complicated Background for Surveillance Camera System*	*Miwa Takai*
NF-000698	*Robotics-Assisted Rehabilitation Therapy for the Hands and Wrists Using Force Sensorless Bilateral Control with Shadow and Mirror Mode*	*Chowarit Mitsantisuk, Kiyoshi Ohishi*
NF-000957	*Optimal Design of Length Factor for Cross-Coupled 2-DOF Motor with Halbach Magnet Array*	*Shodai Tanaka, Tomoyuki Shimono, Yasutaka Fujimoto*
NF-001112	*A Method for Improving Scaling Bilateral Control by Integration of Physical and Control Scaling Ratio*	*Kenji Ogawa, Ryohei Kozuki, Kouhei Ohnishi*
NF-002364	*Ultrafine Manipulation Considering Input Saturation Using Proxy-based Sliding Mode Control*	*Fumito Nishi, Seiichiro Katsura*
NF-002402	*Position based Free-Motion Data Connecting by using Minimum Force-Differential Model*	*Ko Igarashi, Seiichiro Katsura*

SS-02-1   *10:30-12:30 at Room B (#5221), Saturday March 7, 2015*

Advanced Motion Control on Electric Vehicles and Sustainable Mobility 1: session chairs, Hiroshi Fujimoto (Japan), Paolo Bosetti (Italy)

NF-000159	*Robust Yaw-Moment Control for Electric Vehicles*	*Jia-Sheng Hu, Yafei Wang, Hiroshi Fujimoto, Yoichi Hori*
NF-000213	*Electric Vehicles with Individually Controlled On-board Motors: Revisiting the ABS Design*	*Valentin Ivanov, Dzmitry Savitski, Klaus Augsburg, Phil Barber*
NF-001589	*Adaptive Backstepping Controller with Kalman State Estimator for Stabilisation and Manoeuvre of pedestrian controlled Uniaxial Transport Vehicles*	*Matthias Brüning, Gregor Thiele, Werner Schönewolf, Jörg Krüger*
NF-001643	*Position and speed control of a low-cost two-wheeled, self-balancing inverted pendulum vehicle*	*Mirko Brentari, Andrea Zambotti, Luca Zaccarian, Paolo Bosetti, Francesco Biral*
NF-002135	*Minimum Collision Avoidance Distance Control for Four-wheel-driven Electric Vehicles with Active Front and Rear Steerings*	*Daisuke Sawamura, Hiroshi Fujimoto*
NF-002003	*Lift Control of Electric Airplanes by Using Propeller Slipstream for Safe Landing*	*Nobukatsu Konishi, Hiroshi Fujimoto, Yasumasa Watanabe, Kojiro Suzuki, Hiroshi Kobayashi, Akira NIshizawa*

TT-04   *10:30-12:30 at Room C (#5222), Saturday March 7, 2015*

Mechatronics and Robotics: session chairs, Rached Dhaouadi (UAE), Markus Hutterer (Austria)

NF-000078	*Nonlinear Reduced Order Observer Design for Elastic Drive Systems Using Invariant Manifolds*	*Irfan Ullah Khan, Rached Dhaouadi*
NF-000612	*Automatic loop shaping: optimization-based controller tuning for motion systems*	*Benjamin Henke, Michael Ringkowski, Oliver Sawodny*
NF-001597	*Filter choice for an effective measurement noise attenuation in PI and PID controllers*	*Mikulas Huba*
NF-000256	*A Nonlinear Stability Analysis for the Robust Position Control Problem of Robot Manipulators via Disturbance Observer*	*Emre Sariyildiz, Haoyong Yu, Koyo Yu, Kouhei Ohnishi*
NF-000558	*Decoupled Control of an Active Magnetic Bearing System for a High Gyroscopic Rotor*	*Markus Hutterer, Matthias Hofer, Manfred Schrödl*
NF-001155	*Variable Noise-Covariance Kalman Filter based Instantaneous State Observer for Industrial Robot*	*Takashi Yoshioka, Thao Tran Phuong, Kiyoshi Ohishi, Toshimasa Miyazaki, Yuki Yokokura*

SS-08   *13:30-15:30 at Room A (#5211), Saturday March 7, 2015*

Smart Precision Motion Control in Mechatronic Systems: session chairs, Kenta Seki (Japan), Koichi Sakata (Japan)

NF-001066	*Feasible trajectory generation for a dual stage positioning system using a simplified model predictive control approach*	*Roberto Oboe, Riccardo Antonello, Hiroshi Fujimoto, Wataru Ohnishi, Yuma Yazaki, Stefano Bizzotto, Emanuele Siego*
NF-001988	*GA-Based Auto-Tuning of Vibration Suppression Controller for Positioning Devices with Strain Wave Gearings*	*Masafumi Yamamoto, Yoshifumi Okitsu, Makoto Iwasaki*
NF-001333	*Integrated Servo-Mechanical Design Using Nyquist Plots for Chance-Constrained Robust Mechatronics*	*Yan Zhi Tan, Chee Khiang Pang, Tong Heng Lee*
NF-002445	*Robust Vibration Suppression Control for Resonant Frequency Variation in Dual-Stage Actuator-Driven Load Devices*	*Yusaku Shinohara, Kenta Seki, Makoto Iwasaki*
NF-000671	*Common Zeros in Synchronization of High-Precision Stage Systems*	*Miguel Ochoa Navarrete, Marcel Heertjes, Robert Munnig Schmidt*
NF-002097	*LMI-Based Position Command Design of Table Systems Considering Compensation for Impact Force and Interference*	*Naoto Sugiura, Kazuaki Ito, Makoto Iwasaki*

SS-02-2   *13:30-15:30 at Room B (#5221), Saturday March 7, 2015*

Advanced Motion Control on Electric Vehicles and Sustainable Mobility 2: session chairs, Francesco Biral (Italy), Toshiaki Tsuji (Japan)

NF-000655	*Basic Study of Transmitting Power Control Method without Signal Communication for Wireless In-Wheel Motor via Magnetic Resonance Coupling*	*Dasiuke Gunji, Takehiro Imura, Hiroshi Fujimoto*
NF-001244	*Taniguchi-Pulse Width Amplitude Modulation for High Efficiency Power Train of Electric Vehicle*	*Keisuke Ishida, Atsuo Kawamura*
NF-002127	*Estimation and Control of Lateral Displacement of Electric Vehicle Using WPT Information*	*Pakorn Sukprasert, Binh Minh Nguyen, Hiroshi Fujimoto*
NF-002453	*Sensorless Pedaling Torque Estimation by Front and Rear Wheels Independently Driven Power Assist Bicycle*	*Hiroyuki Kawajiri, Hiroto Mizoguchi, Sho Sakaino, Toshiaki Tsuji*

NF-002011   *Posture Stabilization of Two-Wheel Drive Electric Motorcycle by Slip   Takamasa Abumi, Toshiyuki Murakami*
             Ratio Control Considering Camber Angle

TT-05   13:30-15:30 at Room C (#5222), Saturday March 7, 2015
Control Theory: session chairs, Mikulas Huba (Slovakia), Noriaki Hirose (Japan)

NF-000264   *Practical PID Controller Tuning for Motion Control   Ozhan Ozen, Emre Sariyildiz, Haoyong Yu, Kenji Ogawa,*
             Kouhei Ohnishi, Asif Sabanovic

NF-001635   *Robustness versus performance in PDO FPI Control of the IPDT   Mikulas Huba*
             plant

NF-000094   *Fusion of Large-Time-Delay Measurement with Non-Delay   Binh Minh Nguyen, Hiroshi Fujimoto, Yoichi Hori*
             Measurement based on Upper-Bound Scheme

NF-000647   *Generation Method of Admissible Sets for Mode Switching Control   Yuma Yazaki, Hiroshi Fujimoto*
             Using Final-State Control with Thrust Limitation

NF-001708   *Weight Optimization for H Infinity Loop Shaping Method Using   Takayuki Kubo, Kazuhiro Yubai, Daisuke Yashiro, Junji*
             Frequency Response Data for SISO Stable Plant   Hirai

SS-09   16:00-18:00 at Room A (#5211), Saturday March 7, 2015
Advanced Control Technologies for Nanoscale Servo Systems: session chairs, Kazuaki Ito (Japan), Chee Khiang Pang (Singapore)

NF-000477   *Design of a Feedforward Control System Considering Dead Time for   Keisuke Yoshida, Takahiro Ohashi, Kiyoshi Ohishi,*
             Optical Disc Systems   Toshimasa Miyazaki

NF-001228   *Multirate Adaptive Feedforward FIR Filter for Suppressing   Weili Yan, Chunling Du, Chee Khiang Pang*
             Disturbances to the Nyquist Frequency and Beyond

NF-001961   *Reaction-Torque-Based Reflected Wave Rejection for Vibration   Eiichi Saito, Seiichiro Katsura*
             Suppression of Integrated Resonant and Time-Delay System

NF-002062   *Compensation for Torque Fluctuation Caused by Temperature Change Daisuke Matsuka, Satoshi Fukushima, Makoto Iwasaki*
             in Fast and Precise Positioning of Galvanometer Scanners

NF-002143   *Use of MEMS Accelerometers for Load Position Estimation of Ball-   Koji Watanabe, Kazuaki Ito, Katsumi Inuzuka*
             screw Driven Table Systems

NF-002461   *Impact of hysteresis lost motion on the sensorless torsion control of   Michael Ruderman, Makoto Iwasaki*
             elastic robotic joints

SS-10   16:00-18:00 at Room B (#5221), Saturday March 7, 2015
Electrical Machines and Drives for Automobile Applications: session chairs, Saha Suburata (Japan), Takashi Kosaka (Japan)

NF-001465   *Parameter Sensitivity Study for Optimization of Single Phase E-Core   Erwan Sulaiman, Siti Nur Umira Zakaria*
             Hybrid Excitation Flux Switching Machine

NF-001929   *Groove Depth Determination Based on Extended Leakage Factor in a   Bonkil Koo, Minhyeok Lee, Kwanghee Nam*
             12-Slot 10-Pole Machine

NF-001295   *Optimization of Outer-Rotor HEFSM for In-Wheel Direct Drive   Md Zarafi Ahmad, Erwan Sulaiman*
             Electric Vehicle

NF-000507	*Operation Evaluations in High Speed Range of Wound Field Synchronous Motor Drive Integrated with ZSI*	Genki Tajima, Takashi Kosaka, Nobuyuki Matsui, Kazuki Tonogi, Norimoto Minoshima, Toshihiko Yoshida
NF-000337	*Quick and Stable Speed Control of SPMSM Based on Current Differential Signal and Extension of DC-Link Voltage Utilization in Flux-Weakening Region*	Yoshiaki Seki, Kiyoshi Ohishi, Yuki Yokokura
NF-001716	*Proposal of Ultra High Efficient Energy Conversion System (HEECS) for Electric Vehicle Power Train.*	Yukihiro Tanaka, Yukinori Tsuruta, Takahiro Nozaki, Atsuo Kawamura

TT-06   ***16:00-18:00 at Room C (#5222), Saturday March 7, 2015***
Haptics: session chairs, Daisuke Yashiro (Japan), Chawarit Mitsantisuk (Thailand)

NF-000582	*Analysis and Compensation of Operational Force in Bilateral Control Systems under Time-Varying Delay*	Yoshiki Ohno, Nobuto Yoshimura, Kouhei Ohnishi
NF-001252	*The Contact/Non-contact Thimble Haptic device*	Woohyeok Choi, Sungmoon Hur, Jaeha Kim, Yonghwan Oh
NF-001775	*A Quantization Method for Haptic Data Lossy Compression*	Tomohiro Nakano, Seiji Uozumi, Rolf Johansson, Kouhei Ohnishi
NF-000965	*An Estimation of Strength Ratios of Antagonistic Muscle Groups Based on Variable Moment Arm*	Naoya Tojo, Tomoyuki Shimono
NF-001937	*Reproduction of Motion Obtained in Bilateral Control Considering Environment Position*	Seinan Kyo, Kouhei Ohnishi
NF-002291	*Quantitative Evaluation of Stroke Paralysis Considering Individual Differences in Symptoms*	Takaaki Ikeda, Kenji Ogawa, Kouhei Ohnishi

SS-05   ***9:30-12:00 at Room A (#5211), Sunday March 8, 2015***
Advanced Control Technologies Applied to Mechanical System: session chairs, Kenichiro Nonaka (Japan), Seiichiro Katsura (Japan)

NF-002372	*Dynamics of a Two-Mass-Spring System Which Is Separated by External Input*	Yohei Kushida, Susumu Hara
NF-001279	*Experimental verification of engine vibration suppression control using Hybrid Electric Vehicle simulator*	Tomoki Yamazaki, Tatsuro Fujita, Masami Iwase
NF-001287	*Modeling and Control of snake-like robot to move in the tube*	Makito Kasahara, Takeru Yanagida, Masami Iwase
NF-001457	*Velocity Estimation using EKF for Caster Odometers - Numerical Verification -*	Yuta Yonezawa, Kazuma Sekiguchi, Kenichiro Nonaka
NF-002321	*Configuration of High Reliable Distributed Control System*	Yunfei Zang, Yasutaka Fujimoto
NF-002437	*Analysis of Touching Motion Using Singular Spectrum Transformation*	Eri Fujii, Seiichiro Katsura
NF-002429	*Rubbing Motion Reproduction Method in Work Space by Considering Summation of Contact Force*	Ryutaro Honjo, Seiichiro Katsura

SS-07   ***9:30-12:00 at Room B (#5221), Sunday March 8, 2015***

Network-based Control Systems and Its Applications: session chairs, Yutaka Uchimura (Japan), Kenji Natori (Japan)

NF-002356	*Circle Theorem-based Realization of Nonlinear Force Control for Teleoperation under Time Delay*	*Hidetaka Morimitsu, Seiichiro Katsura*
NF-000116	*An Analysis and Design of Velocity Feedback in Time-Delayed Teleoperation System*	*Nobuto Yoshimura, Yoshiki Ohno, Kouhei Ohnishi*
NF-000566	*Damping Injection Using Position-Based Contact Detection for Bilateral Control System under Time Delay*	*Shuhei Shimizu, Yoshiki Ohno, Kouhei Ohnishi*
NF-000787	*On Event-triggered and Self-triggered Control Using Online Optimization*	*Koichi Kobayashi, Kunihiko Hiraishi*
NF-001848	*Elimination of Reactive Operational Force in Bilateral Control System under Time Delay*	*Ryohei Kozuki, Kenji Ogawa, Kouhei Ohnishi*
NF-000086	*Implementation of Dual Model-Free Time Delay Compensator for Bilateral Control System with Time Delay*	*Shoyo Hyodo, Kouhei Ohnishi*
NF-001015	*Prediction error observer for networked predictive control systems with network delay and model error*	*Takuya Takahashi, Yutaka Uchimura*

TT-07　　**9:30-12:00 at Room C (#5222), Sunday March 8, 2015**

Sensing Technology: session chairs, Valentin Ivanov (Germany), Naoki Oda (Japan)

NF-000701	*Adaptive Source Localization with Unknown Permittivity and Path Loss Coefficients*	*Baris Fidan, Ilknur Umay*
NF-001007	*Development of an Optical Fiber FMG Sensor for the Assessment of Hand Movements and Forces*	*Eric Fujiwara, Yu Tzu Wu, Murilo F. M. Santos, Egont A. Schenkel, Carlos K. Suzuki*
NF-001236	*Map Building of Uncertain Environment Based on Iterative Closest Point Algorithm on the Cloud*	*Yi-Jou Wen, Chen-Chien Hsu, Wei-Yen Wang*
NF-001341	*Hardware-assisted Direction Estimation for Mobile Robot Target Tracking Applications*	*Geunho Lee*
NF-000817	*Robust Attitude Tracking Control of Hexarotor MAVs using Plug-In Gain Scheduling Robust Compensator Technique*	*Nurul Dayana Salim, Dafizal Derawi, Hairi Zamzuri, Mohd Azizi Abdul Rahman, Shahrum Shah Abdullah*