

| November 1, 2019 (Friday) | | | | |
|---------------------------|-------|--|--|---|
| From | To | Room LTh | Room M8 | Room M9 |
| 8:30 | 9:30 | Registration | | |
| 9:30 | 10:00 | Opening Ceremony | | |
| 10:00 | 10:15 | Coffee Break | | |
| 10:15 | 11:15 | | Session: 1A1 Stochastic Control and Related Problems Chair: Prof. Mori (Univ. of Aizu) | Session: 1B1 Human Perception, Goal-oriented Behavior, and Collective Human Behavior Char: Prof. Lubashevsky (Univ. of Aizu) Co-Chair: Prof. Akahori (Ritsumeikan Univ.) |
| 11:15 | 11:30 | Coffee Break | | |
| 11:30 | 12:30 | | Session: 1A1 Stochastic Control and Related Problems Chair: Prof. Mori (Univ. of Aizu) | Session: 1B1 Human Perception, Goal-oriented Behavior, and Collective Human Behavior Char: Prof. Lubashevsky (Univ. of Aizu) Co-Chair: Prof. Akahori (Ritsumeikan Univ.) |
| 12:30 | 13:30 | Lunch & Extended Organizing Meeting | | |
| 13:30 | 14:30 | | Session: 1A2 General Problems of Nonlinear Stochastic System Chair: Prof. Fujisaki (Osaka Univ.) | Session: 1B2 Global Navigation Aattellite System: Data Analysis Chair: Prof. Pyshkin (Univ. of Aizu) |
| 14:30 | 14:45 | Coffee Break | | |
| 14:45 | 15:45 | | Session: 1A3 Financial Mathematics and Stochastic Differential Equations Chair: Prof. Akahori (Ritsumeikan Univ.) Co-Chair: Prof. Lubashevsky (Univ. of Aizu) | Session: 1B3 Formalism of Stochastic Prosses: Novel Application Chair: Prof. Yaguchi (Univ. of Aizu) |
| 15:45 | 16:00 | Coffee Break | | |
| 16:00 | 16:40 | | Session: 1A3 Financial Mathematics and Stochastic Differential Equations Chair: Prof. Akahori (Ritsumeikan Univ.) Co-Chair: Prof. Lubashevsky (Univ. of Aizu) | Session: 1B3 Formalism of Stochastic Prosses: Novel Application Chair: Prof. Yaguchi (Univ. of Aizu) |
| 16:40 | 16:55 | Coffee Break | | |
| 16:55 | 17:55 | Keynote Lecture Chair: Prof. Lubashevsky (Univ. of Aizu) Cyber-Physical Space Prof. Keitaro Naruse (University of Aizu) | | |
| 18:10 | 20:10 | Banquet & Awards (Keyaki, University of Aizu) | | |

| November 2, 2019 (Saturday) | | | | |
|-----------------------------|-------|-------------------------------------|---|---------|
| From | To | Room LTh | Room M8 | Room M9 |
| 9:00 | 10:00 | Registration | | |
| 10:00 | 10:40 | | Session: 2A1 Robotics and Related Problems of Control Chair: Prof. Naruse (Univ. of Aizu) Co-Chair: Prof. Mori (Univ. of Aizu) | |
| 10:40 | 10:55 | Coffee Break | | |
| 10:55 | 11:35 | | Session: 2A1 Robotics and Related Problems of Control Chair: Prof. Naruse (Univ. of Aizu) Co-Chair: Prof. Mori (Univ. of Aizu) | |
| 11:35 | 13:00 | Lunch & Extended Organizing Meeting | | |
| 13:30 | 13:50 | | Session: 2A2 Round Table: Open and Novel Problems in Random Phenomena Chair: Prof. Lubashevsky (Univ. of Aizu) | |
| 13:50 | 14:05 | Coffee Break | | |
| 14:05 | 14:35 | Closing Ceremony | | |

| Date | Venues | Events | Authors List |
|--------|----------------------|---------------------------------------|-------------------------------------|
| Nov. 1 | 9:30 10:00 Room LTh | Opening Ceremony | |
| | 10:00 10:15 | Coffee Break | |
| | 16:40 16:55 | Coffee Break | |
| | 16:55 17:55 Room LTh | Keynote Lecture: Cyber-Physical Space | Keitaro Naruse (University of Aizu) |
| | 18:10 20:10 Keyaki | Banquet & Awards | |
| Nov. 2 | 14:05 14:35 Room LTh | Closing Ceremony | |

| Date | From | To | Venues | Events | Authors List | Paper ID |
|--------|-------|-------|---------|---|---|-----------|
| Nov. 1 | 10:00 | 10:15 | | Coffee Break | | |
| | 10:15 | 12:30 | Room M8 | Session 1A1: Stochastic Control and Related Problems | Chair: Prof. Mori (Univ. of Aizu) | |
| | 10:15 | 10:35 | 1A1-1 | Stochastic Stability in Optimally Controlled Nonlinear Oscillatory Systems | Hirokazu Ohtagaki (Okayama Univ. of Science) | SSS19-31 |
| | 10:35 | 10:55 | 1A1-2 | On Asymptotic Distributions of Estimators Concerned with Fuzzy Random Data as Vague Perceptions of Crisp Random Phenomena | T. Fukuda (Otemon Gakuin Univ.) | SSS19-6 |
| | 10:55 | 11:15 | 1A1-3 | Control System for Water Level Control of Flash Chamber in a Spray Flash Desalination System via Stochastic Processes | Yoshitaka Matsuda (Saga Univ.) Ryoichi Sakai (Saga Univ.) Takenao Sugi (Saga Univ.) Satoru Goto (Saga Univ.) Takeshi Yasunaga (Saga Univ.) Yasuyuki Ikegami (Saga Univ.) | SSS19-14 |
| | 11:15 | 11:30 | | Coffee Break | | |
| | 11:30 | 11:50 | 1A1-4 | On Particle Degeneracy for Particle Filters | Masaya Murata (JAXA) | SSS19-2 |
| | 11:50 | 12:10 | 1A1-5 | Multi-Agent Based Load Balancing Dispatch for Power Systems with Renewable Energy | Kenta Hanada (Osaka Univ.) Takayuki Wada (Osaka Univ.) Izumi Masubuchi (Kobe Univ.) Toru Asai (Nagoya Univ.) Yasumasa Fujisaki (Osaka Univ.) | SSS19-17 |
| | 12:10 | 12:30 | 1A1-6 | Stochastic distributed optimization for microgrid management | Takumi Namba (Ritsumeikan University) Shinya Funabiki (Ritsumeikan University) Kiyotsugu Takaba (Ritsumeikan University) | SSS19-21 |
| | 12:30 | 13:30 | | Lunch & Extended Organizing Meeting | | |
| | 13:30 | 14:30 | Room M8 | Session 1A2: General Problems of Nonlinear Stochastic Systems | Chair: Prof. Hirokazu Ohtagaki (Okayama Univ. of Science) Co-Chair: Prof. Yasumasa Fujisaki (Osaka Univ.) | |
| | 13:30 | 13:50 | 1A2-1 | Synchronization of Chaos-Chaos Intermittency Controlled by External Feedback and Stochastic Noise | Natsusaku Shibata (Chiba Inst. of Tech.) Sou Nobukawa (Chiba Inst. of Tech.) | SSS19-4 |
| | 13:50 | 14:10 | 1A2-2 | Chaotic Phenomena in Piecewise Continuous Maps derived Nonlinear Oscillatory Systems | Takahiro Yamaguchi (Okayama Univ. of Science) Hiroyuki Asahara (Okayama Univ. of Science) Hirokazu Ohtagaki (Okayama Univ. of Science) | SSS-19-30 |
| | 14:10 | 14:30 | 1A2-3 | Software Reliability Analysis Based on Hierarchical Dynamic Models and Bayesian Estimations using Machine Learning | Toru Kaise (Univ. of Hyogo) | SSS19-20 |
| | 14:30 | 14:45 | | Coffee Break | | |
| | 14:45 | 16:20 | Room M8 | Session 1A3: Financial Mathematics and Stochastic Differential Equations | Chair: Prof. Jiro Akahori (Ritsumeikan Univ.) Co-Chair: Prof. Ihor Lubashevsky (Univ. of Aizu) | |
| | 14:45 | 15:05 | 1A3-1 | Comments on a Numerical Scheme for Expectations with First Hitten Time to Smooth Boundary | Yuma Tamura (Ritsumeikan Univ.) | SSS19-28 |
| | 15:05 | 15:25 | 1A3-2 | Malliavin-Moncino's Foulrier Estimation Method and its Potential Applications | Atsuhiko Watanabe (Ritsumeikan Univ.) | SSS19-25 |
| | 15:25 | 15:45 | 1A3-3 | Stochastic Hamiltonian Systems for Economic Growth Models | Jiro Akahori (Ritsumeikan Univ.) Kensuke Nagata (Ritsumeikan Univ.) Kota Suzuki (Ritsumeikan Univ.) | SSS19-26 |
| | 15:45 | 16:00 | | Coffee Break | | |
| | 16:00 | 16:20 | 1A3-4 | Robust optimal reinsurance and investment for an insurer in multiple stocks and default table bonds | T. Yoshida (Hosei Univ.) Kazuhiro Yasuda (Hosei Univ.) | SSS19-7 |
| | 16:20 | 16:40 | 1A3-5 | Testing Long-Run Neutrality in Japan | Yoji Morita (Kyoto Univ. of Advanced Science) Yoshitaka Sawada (Kyoto Univ. of Advanced Science) Shigeyoshi Miyagawa (Kyoto Univ. of Advanced Science) | SSS19-5 |
| | 16:40 | 16:55 | | Coffee Break | | |
| Nov. 2 | 9:40 | 11:35 | Room M8 | Session 2A1: Robotics and Related Problems of Control | Chair: Prof. Keitaro Naruse (Univ. of Aizu) Co-Chair: Prof. Kazuyoshi Mori (Univ. of Aizu) | |
| | 9:40 | 10:00 | 2A1-1 | Millimeter-scale Landslide Detection using GNSS Precise Positioning with Orthogonal Function Filtering | Koki Asari (Ritsumeikan Univ., SPAC) Masuyuki Saito (SPAC) Izumi Mikami (SPAC) Yukihiro Kubo (Ritsumeikan Univ.) Sueo Sugimoto (Ritsumeikan Univ.) | SSS19-11 |
| | 10:00 | 10:20 | 2A1-2 | Stochastic Scheduling for Computational Node Assignment in Network System | Akira Siriwera (Univ. of Aizu) Keitaro Naruse (Univ. of Aizu) | SSS19-29 |
| | 10:20 | 14:40 | 2A1-3 | High-Operationabilty Continuous Pose Inverse Kinematics for Mobile Manipulator | Shota Seki (Univ. of Aizu) Keitaro Naruse (Univ. of Aizu) | |
| | 10:40 | 10:55 | | Coffee Break | | |
| | 10:55 | 11:15 | 2A1-4 | Design of Flight Data Validation Scheme on Autonomous Decentralized Unmanned Vehicle Traffic Management System | Yuichi Yaguchi (Univ. of Aizu) | SSS19-22 |
| | 11:15 | 11:35 | 2A1-5 | Support Vector Strategy on Probabilistic Road Map for Narrow Gap Problem | Yuicni Yaguchi (Univ. of Aizu) | SSS19-23 |
| | 11:35 | 13:00 | | Lunch Break | | |
| | 13:00 | 13:50 | Room M8 | Session 2A2: Round Table: Open and Novel Problems in Random Phenomena (Chair, Prof. Lubashevsky) | Chair: Prof. Ihor Lubashevsky (Univ. of Aizu) | |
| | 13:00 | 13:20 | 2A2-1 | Incompleteness of Stochastic Theory | | |
| | 13:20 | 13:50 | 2A2-2 | Irregular Non-Probabilistic Phenomena (Physics of the Human Mind) | | |

| Date | From | To | Venues | Events | Authors List | Paper ID |
|--------|-------|-------|---------|---|--|----------|
| Nov. 1 | 10:00 | 10:15 | | Coffee Break | | |
| | 10:15 | 12:30 | Room M8 | Session 1B1: Human perception, goal-oriented behavior, and collective human behavior | Chair: Prof. Ihor Lubashevsky (Univ. of Aizu) Co-Chair: Prof. Jiro Akahori (Ritsumeikan Univ.) | |
| | 10:15 | 10:35 | 1B1-1 | Mental space and the Fechner-Stevens dilemma | Ihor Lubashevsky (Univ. of Aizu) | SSS19-32 |
| | 10:35 | 10:55 | 1B1-2 | Metrics of one-dimensional mental space: Vowel sound categorization & Gray shade categorization (common presentation) | K. Nihei (Univ. of Aizu) H. Teruya (Univ. of Aizu) Ihor Lubashevsky (Univ. of Aizu) | SSS19-33 |
| | 10:55 | 11:15 | 1B1-3 | Gossip Algorithm for Opinion Dynamics with Probabilistic Group Interactions | Emerico Aguilar (Osaka Univ.) Yasumasa Fujisaki (Osaka Univ.) | SSS19-18 |
| | 11:15 | 11:30 | | Coffee Break | | |
| | 11:30 | 11:50 | 1B1-4 | Dynamical traps as the mechanism of synchronized traffic flow | K. Moriumra (Univ. of Aizu) Ihor Lubashevsky (Univ. of Aizu) | SSS19-34 |
| | 11:50 | 12:10 | 1B1-5 | Non-stationary Car-Following Dynamics: Driving Simulator Experiments | K. Morimura (Univ. of Aizu) A. Usui (Univ. of Aizu) Ihor Lubashevsky (Univ. of Aizu) | SSS19-35 |
| | 12:10 | 12:30 | 1B1-6 | Human response delay: Contribution of conscious processes | T. Suzuki (Univ. of Aizu) Ihor Lubashevsky (Univ. of Aizu) | SSS19-36 |
| | 12:30 | 13:30 | | Lunch & Extended Organizing Meeting | | |
| | 13:30 | 14:30 | Room M8 | Session 1B2: Global Navigation Satellite System: Data Analysis | Chair: Prof. Evgeny Pyshkin (Univ. of Aizu) | |
| | 13:30 | 13:50 | 1B2-1 | Evaluation of Border Including Missing Parts using Fourier Series | Kohei Okishio (Kobe City College of Tech.) Yoshiharu Koya (Kobe City College of Tech.) | SSS19-9 |
| | 13:50 | 14:10 | 1B2-2 | NLOS Satellite Detection Using Fish-Eye Camera for Improving GNSS Positioning Accuracy --- Further Results | Akihiro Yoshida (Ritsumeikan Univ.) Yuihiro Kubo (Ritsumeikan Univ.) Yoshiharu Koya (Kobe City College of Tech.) | SSS19-10 |
| | 14:10 | 14:30 | 1B2-3 | Positioning Accuracy of Single Frequency GNSS PPP by CLAS Comparing with MADOCA Products | Dai Mimura (Ritsumeikan Univ.) Katsumasa Miyatake (Mitsubishi Electronic Corp.) Yukihiro Kubo (Ritsumeikan Univ.) Sueo Sugimoto (Ritsumeikan Univ.) | SSS19-8 |
| | 14:30 | 14:45 | | Coffee Break | | |
| | 14:45 | 16:20 | Room M8 | Session 1B3: Formalism of Stochastic Processes: Novel applications | Chair: Prof. Yuichi Yaguchi (Univ. of Aizu) | |
| | 14:45 | 15:05 | 1B3-1 | Constructing Dynamic Font-based Hairy-Brush Characters Using Deep Learning Approach | Xie Zhenyu (Fukuoka Inst. of Tech.) Hiroyuki Fujioka (Fukuoka Inst. of Tech.) Akinori Hidaka (Tokyo Denki Univ.) Hiroyuki Kano (Tokyo Denki Univ.) | SSS19-15 |
| | 15:05 | 15:25 | 1B3-2 | DP-based Control Point Selection of Periodic Splines and Its Application to Object Contour Modeling | Rachanart Soontornvorn (Fukuoka Inst. of Tech.) Hiroyuki Fujioka (Fukuoka Inst. of Tech.) Hiroyuki Kano (Tokyo Denki Univ.) | SSS19-16 |
| | 15:25 | 15:45 | 1B3-3 | Identification of Electromagnetic Propagation in Human Muscle Tissues: Frequency Dependent Approach | Fumio Kojima (Kobe University) Harvey T. Banks (North Carolina State University) | SSS19-24 |
| | 15:45 | 16:00 | | Coffee Break | | |
| | 16:00 | 16:20 | 1B3-4 | Properties of Estimated Model for Event Related Potential evoked by Attention Task | Kanako Mikami (Kokushikan Univ.) Kunihiko Oura (Kokushikan Univ.) | SSS19-12 |
| | 16:20 | 16:40 | 1B3-5 | Modeling of relationship between walking training apparatus for crutch-walk and walker | Izumi Tsukagoshi (Tokyo Denki Univ.) Jun Inoue (Tokyo Denki Univ.) | SSS19-13 |
| | 16:40 | 16:55 | | Coffee Break | | |