

Program of QP38, 2017

50th anniversary of Faculty of Science & Technology, Tokyo University of Science

October 2, 2017, Monday - Main Session (1)

- 8:40 ~ 9:30 **Registration**
- 9:30 ~ 9:35 **Opening Address I** (Prof. AKIRA FUJISHIMA Ph.D. TUS President)
II (Chair of Organizer)
- 9:35 ~ 10:15 Andrzej Jamiolkowski, Nicholas Copernicus University, Poland
On Partial Commutativity of Kraus and Jump Operators
- 10:15 ~ 10:50 Rajarama Bhat, Indian Statistical Institute, Bangalore Center, India
Two states
- 10:50 ~ 11:15 **Coffee Break**
- 11:15 ~ 11:55 Un Cig Ji, Chungbuk National University, Korea
Anticipating Quantum Stochastic Integrals
- 11:55 ~ 12:35 Rene Schott, University of Lorraine, France
On stochastic calculus with respect to q -Brownian motion
- 12:35 ~ 12:50 **Coffee Break**
- 12:50 ~ 13:30 Si Si, Aichi Prefectural University, Yangon University, Myanmar
A short view on Professor Takeyuki Hida's work
- 13:30 ~ 14:30 **Lunch Break and Poster Presentation**
- 14:30 ~ 15:10 Habib Rebei, Qassim University, Kingdom of Saudi Arabia
 C^ -quadratic quantization*
- 15:10 ~ 15:50 Zouhair Mouayn, Sultan Moulay Slimane University, Morocco
Analysis of photon-count number distributions associated with higher Landau levels
- 15:50 ~ 16:00 **Coffee Break**
- 16:00 ~ 16:40 Soumalya Joardar, J.N.Centre for Advanced Scientific Research, India
Weyl algebra, Hyperbolic space and Noncommutative Hyperbolic plane
- 16:40 ~ 17:20 Matteo Gregoratti, Politecnico di Milano, Italy
Measurement Uncertainty Relations for Position and Momentum: Relative Entropy Formulation
- 17:20 ~ 17:30 **Coffee Break**
- 17:30 ~ 18:10 Ameer Dhahri, Chungbuk National University, Korea
 C^ -non-linear second quantization*
- 18:30 ~ **Welcome Party** (at Cafeteria (2F) in Canal Hall)

October 3, 2017, Tuesday - Main Session (2)

- 9:00 ~ 9:40 Franco Fagnola, Politecnico di Milano, Italy
On the structure of quantum Markov semigroups
- 9:40 ~ 10:20 Debashish Goswami, Indian Statistical Institute, Kolkata, India
Levi-civita connection in Noncommutative Geometry
- 10:20 ~ 10:35 **Coffee Break**
- 10:35 ~ 11:15 Farrukh Mukhamedov, United Arab Emirates University, UAE
Quantum Markov Chains associated with statistical mechanics models
- 11:15 ~ 11:55 Francesco Fidaleo, University of Rome "Tor Vergata", Italy
Type III representations and Modular Spectral Triples for the noncommutative torus
- 11:55 ~ 12:10 **Coffee Break**
- 12:10 ~ 12:50 Dariusz Chruscinski, Nicolaus Copernicus University, Poland
On memory kernel master equations
- 12:50 ~ 13:30 Minoru Yoshida, Kanagawa University, Japan
Conditional distribution of a random variable, conditioned by Hida distributions, on Euclidean quantum fields.
- 13:30 ~ 14:15 **Lunch Break and Poster Presentation**
- 14:15 ~ 14:25 **Conference Photo** (at outside steps of Canal Hall)
- 14:30 ~ 15:30 **Special Talk**
Luigi Accardi, Centro Vito Volterra, Università di Roma "Tor Vergata", Italy
Complementary pairs: short review and new examples
- 15:30 ~ 15:40 **Coffee Break**
- 15:40 ~ 16:20 Kimiaki Saito, Meijo University, Japan
Powers of white noise associated with the product of distributions
- 16:20 ~ 17:00 Janusz Wysoczanski, Wroclaw University, Poland
Poisson type limit theorems for bm-independence
- 17:00 ~ 17:10 **Coffee Break**
- 17:10 ~ 17:40 Nicolas Privault, Nanyang Technological University, Singapore
De Rham-Hodge decomposition and vanishing of harmonic forms by derivation operators on the Poisson space
- 17:40 ~ 18:10 Vitonofrio Crismale, University of Bari, Italy
*Wick order and spreadable stochastic processes on the monotone *-algebra*
- 18:10 ~ 18:30 Nazife Erkursun Ozcan (Hacettepe University, Turkey) and
Farrukh Mukhamedov (United Arab Emirates University, UAE)
Perturbation Bounds of Markov Semigroups on Abstract State Spaces

October 4, 2017, Wednesday - Main Session (3)

- 9:00 ~ 9:40 Roberto Quezada Batalla, Universidad Autónoma Metropolitana-Iztapalapa, Mexico
On Invariant States of Weak Coupling Limit Type Markov Generators: Quantum Transport and Photosynthesis
- 9:40 ~ 10:20 Irina Aref'eva, Steklov Mathematical Institute, Russia
Holographic control of information and dynamical topology change for composed open quantum systems
- 10:20 ~ 10:35 **Coffee Break**
- 10:35 ~ 11:15 Louis Chen, National University of Singapore, Singapore
Stein's method and many interacting worlds in quantum mechanics
- 11:15 ~ 11:55 Uwe Franz, University of Bourgogne Franche-Comté, France
Lévy processes on the Lorentz-Lie algebra
- 11:55 ~ 12:10 **Coffee Break**
- 12:10 ~ 12:50 Habib Ouerdiane, University of Tunis El Manar, Tunisia
Symbols of Generalized White Noise Operators and Applications
- 12:50 ~ 13:30 Roman Belavkin, Middlesex University, United Kingdom
Asymmetric Topology of Quantum Information
- 13:30 ~ 14:30 **Lunch Break and Poster Presentation**
- 14:30 ~ 15:30 **Special Talk**
Igor Volovich, Steklov Mathematical Institute, Russia
Quantum dynamics for non-self-adjoint Hamiltonians
- 15:30 ~ 15:40 **Coffee Break**
- 15:40 ~ 16:20 Yoshifumi Kimura, Nagoya University, Japan
Vortex reconnections in quantum turbulence
- 16:20 ~ 17:00 Wilfredo Urbina Romero, Roosevelt University Chicago, U.S.A.
Topics on Gaussian harmonic analysis on L_p variables spaces
- 17:00 ~ 17:10 **Coffee Break**
- 17:10 ~ 18:10 **Round Table (AQPIDA Meeting)**
Kalyan Bidhan Sinha, Indian Statistical Institute, Bangalore Center, India
- 18:30 ~ **Banquet** (at Cafeteria (1F) in Canal Hall)

October 5, 2017, Thursday - Main Session (4)

9:00 ~ 11:20	Round Table 1 (Free Discussion)
11:20 ~ 11:40	Coffee Break
11:40 ~ 13:40	Round Table 2 (Free Discussion)
13:40 ~ 14:40	Lunch Break and Poster Presentation
14:40 ~ 16:00	Round Table 3 (Free Discussion)
16:00 ~ 16:40	Coffee Break
16:40 ~ 18:00	Round Table 4 (Free Discussion)

October 6, 2017, Friday - Main Session (5)

- 9:00 ~ 9:40 Andrei Khrennikov, Linnaeus University, Sweden
Quantum-like models of cognitive and social processes. Social laser in action: from color revolutions to Brexit and election of Donald Trump
- 9:40 ~ 10:20 Aurel I. Stan, The Ohio State University at Marion, U.S.A.
A Holder inequality for norms of Gamma Wick products
- 10:20 ~ 10:30 **Coffee Break**
- 10:30 ~ 11:10 Tadashi Toyoda and Maho Fujita, Tokai University, Japan
Quantum field theory and nanotechnology
- 11:10 ~ 11:50 Gniewomir Sarbicki, Nicolaus Copernicus University, Poland
Quantum environment probing
- 11:50 ~ 12:00 **Coffee Break**
- 12:00 ~ 12:40 Miloud Assal, University of Jeddah, Tunisia
New ring Approaches to Solve Class of Partial Differential Equations
- 12:40 ~ 13:20 Rachid El Harti, University Hassan First, Morocco
Hilbert Modules and Quantum probability
- 13:20 ~ 14:20 **Lunch Break and Poster Presentation**
- 14:20 ~ 15:00 Noboru Watanabe, Tokyo University of Science, Japan
Note on Transmitted Complexity for Quantum Dynamical Systems
- 15:00 ~ 15:40 Jorge Bolanos, Universidad Autónoma Metropolitana-Iztapalapa, Mexico
Block representation and some spectral properties of circulant QMS
- 15:40 ~ 15:50 **Coffee Break**
- 15:50 ~ 16:30 Takahi Matsuoka, Suwa Tokyo University of Science, Japan
On Quantum Conditional Entropy
- 16:30 ~ 17:10 Satoshi Iriyama, Tokyo University of Science, Japan
A Combined Quantum Algorithm and Its Computational Complexity
- 17:10 ~ 17:20 **Coffee Break**
- 17:20 ~ 17:50 Emanuela Sasso, Genova University, Italy
Characterization of decoherence-free subsystems
- 17:50 ~ 18:20 Malte Gerhold, University Greifswald, Germany
Notions of independence for multifaced random variables

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Poster Presentation

1. Philipp Varso, University Greifswald, Germany
On general universal independences
2. Monika Malczak, University Greifswald, Germany
Levy processes on braided \ast -bialgebras
3. Yujiro Igari, Noboru Watanabe, Tokyo University of Science, Japan
On comparison of quantum mutual entropy type measures
4. Shun Kato, Noboru Watanabe, Tokyo University of Science, Japan
On construction of quantum teleportation by majoring of quantum orthogonal states generated by coherent states
5. Takumi Makiwara and Noboru Watanabe, Tokyo University of Science, Japan
On Mathematical treatment of Information transmission for Gaussian Communication Process based on Quantum Communication Theory
6. Kyouhei Ohmura and Noboru Watanabe, Tokyo University of Science, Japan
Formulations of Quantum Dynamical Mutual Entropy based on AOW Entropy