

Program of QBIC Workshop 2015

October 17, 2015, Saturday - Main Session (1)

- 9:55 ~ 10:00 *Opening Address*
- 10:00 ~ 10:50 A. Jamiolkowski, Nicolaus Copernicus University, Poland
*On Decompositions of Open Dynamical Systems
with Time-Dependent Generators*
- 10:50 ~ 11:40 D. Chruscinski, Nicolaus Copernicus University, Poland,
On Admissible Memory Kernels for Random Unitary Qubit Evolution
- 11:40 ~ 13:30 **Lunch Break and Poster Presentation**
- 13:30 ~ 14:20 F. Hiai, Emeritus Professor, Tohoku University, Japan
Quantum divergences and reversibility
- 14:20 ~ 15:10 T. Matsuoka, Suwa Tokyo University of Science,
Mutual entropy on quantum encoding
- 15:10 ~ 15:30 **Coffee Break**
- 15:30 ~ 16:20 S. Iriyama and M. Ohya, Tokyo University of Science, Japan,
*Mathematical model of adaptive computation and its application for
the brain model*
- 16:20 ~ 17:10 M. Asano, Tokuyama Technical College, Japan
*Quantum-like Model of Decision-making in Situation of Risk
and Prospect Theory*
- 17:10 ~ 17:20 **Coffee Break**
- 17:20 ~ 17:50 Y. Saigusa, K. Tahata and S. Tomizawa, Tokyo University of Science,
Japan
On decompositions of symmetry for square contingency tables
- 18:00 ~ **Welcome Party** (at Cafeteria (2F) in Canal Hall)

October 18, 2015, Sunday - Main Session (2)

- 10:00 ~ 10:50 L. Accardi, Roma II University, Italy
Q-Jordan-Wigner embeddings and associated white noises
- 10:50 ~ 11:40 M. Regoli, Roma II University, Italy
*Software implementation of a new family of cryptographic algorithms:
problems and solutions*
- 11:40 ~ 14:00 **Lunch Break and Poster Presentation (Photo)**
- 14:00 ~ 15:00 T. Hida, Emeritus Professor, Nagoya University, Japan,
*Some topics on application of white noise theory (**special talk**)*
- 15:00 ~ 15:50 Si Si, Emeritus Professor, Aichi Prefectural University, Myanmar
*The space noise and the convex cone of linear systems
defined by the noise*
- 15:50 ~ 16:10 **Coffee Break**
- 16:10 ~ 17:00 I. Yamato, Tokyo University of Science, Japan
Proposal of principles in bioenergy transduction and
information biology
- 17:00 ~ 17:50 N. Watanabe, Tokyo University of Science, Japan
Note on Entropies for Quantum Dynamical Systems
- 18:00 ~ **Banquet** (at Cafeteria (2F) in Canal Hall)

October 19, 2015, Monday - Main Session (3)

- 10:00 ~ 10:50 A. Khrennikov, Linnaeus University, Sweden
*Towards quantum-like modeling of decision making:
Can quantum agents agree to disagree?*
- 10:50 ~ 11:40 I. Ojima, RIMS, Kyoto University, Japan
Geometry of Sector-classifying Space in Categorical QFT
- 11:40 ~ 13:00 **Lunch Break**
- 13:00 ~ 13:50 K. Kuchitsu, Tokyo University of Science, Japan
Signaling Network in Plants
- 13:50 ~ 14:40 K. Sato, Tokyo University of Science, Japan
*Prognostic classification of breast cancer based on
information measure*
- 14:40 ~ 15:00 **Coffee Break**
- 15:00 ~ 15:50 Y. Tanaka, Tokyo University of Science, Japan
Adaptive dynamics and double slit experiment
- 15:50 ~ 16:20 Y. Kondo and S. Miyazaki, Tokyo University of Science, Japan,
Functional Site Prediction of Translation Elongation Factor 1A

List of Poster Presentations

1. Hiromi Ito, Noboru Watanabe, Tokyo University of Science, Japan
On Construction of Connected Channel and its Quantum Capacity
2. Takaya Suzuki, Noboru Watanabe, Tokyo University of Science, Japan
On state change of FTM gate by using the orthogonal states
3. Keita Kohira, Noboru Watanabe, Tokyo University of Science, Japan
On construction of quantum logical gates with a general beam splitting by Fichtner-Freudenberg expression
4. Masahiro Muto, Noboru Watanabe, Tokyo University of Science, Japan
On construction of KOW entropy and its computation for generalized AOW entropy
5. Takahiro Obuchi, Noboru Watanabe, Tokyo University of Science, Japan
On construction of FTM gate by using two orthogonal input states
6. Kyouhei Ohmura, Noboru Watanabe, Tokyo University of Science, Japan
Formulations of Quantum Mean Entropy and Quantum Mean Mutual Entropy and Their Computations
7. Kenji Hashimoto, Shoji Yabuta, Hidetaka Kaya, Nobutaka Kitahata, Toshihide Hara, Keiko Sato and Kazuyuki Kuchitsu, Tokyo University of Science, Japan
Phylogenetic analyses to explore the evolution of enzymes that produce reactive oxygen species in the plant kingdom
8. Bunki Toh¹, Takamitsu Kurusu^{1,2,3}, Yozo Okazaki⁴, Kotaro Nihira¹, Shigeru Hanamata^{1,5}, Tomoko Koyano¹, Nobutaka Kitahata², Noriko Nagata⁶, Kazuki Saito⁴, Kazuyuki Kuchitsu^{1,3}, Tokyo University of Science, Japan
Roles of autophagy during male reproductive development in rice