The 4th Sendai Workshop

Free Probability and Random Matrices

October 10 - 12, 2005

Graduate School of Information Sciences
Tohoku University

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Organizing Committee
F. Hiai (Chair, Tohoku University), N. Obata (Tohoku University),
D. Petz (Alfred Renyi Institute), M. Bożejko (University of Wrocław)

Program

October 10 (Mon)

9:30-10:30 D. Petz (Alfred Renyi Institute of Mathematics, Hungary)
Sufficiency in quantum statistical inference

10:40-11:30 N. Minami (Tsukuba University)
Theory of point processes and some basic notions in energy level statistics

11:30-12:10 N. Akiho (Tohoku University)
Equilibrium states and their macroscopic uniformity in fermion lattice systems

13:30-14:20 H. Tanemura (Chiba University)
Random matrices and noncolliding diffusion processes (joint work with Makoto Katori)

14:20-15:10 U. C. Ji (Chungbuk National University, Korea)
Quantum white noise derivatives

15:20-16:10 M. Choda (Osaka Kyoiku University)
Entropy for unitary operators with an application to entropy for automorphisms of free groups

16:10-17:00 S. Yamagami (Ibaraki University)
Temperley-Lieb categories and Jones-Wenzl recursive formula

October 11 (Tue)

9:30-10:30 B. Collins (Kyoto University)
Integration over compact quantum groups

10:40-11:30 J. Heo (Chungnam National University, Korea)
About the similarity problem

11:30-12:10 N. Muraki (Iwate Prefectural University)
Non-commutative notions of stochastic independence

13:30-14:20 Ł. J. Wojakowski (University of Wrocław, Poland)
Interacting Fock spaces and the universal convolution

14:20-15:10 A. Hora (Okayama University)
Asymptotic analysis of characters of wreath product groups
— Still toward free probability?

15:20-16:20 F. Hansen (University of Copenhagen, Denmark)
Trace functions as Laplace transforms

16:30-17:30 R. Bhatia (Indian Statistical Institute, India)
Riemannian geometry and geometric means of matrices

October 12 (Wed)

10:40-11:40 M. Stolz (University of Bochum)
Random matrices, symmetric spaces, and mesoscopic physics

11:40-12:20 H. Ohno (Tohoku University)
Factors generated by C*-finitely correlated states

13:30-14:20 A. Krystek (University of Wrocław, Poland)
Deformation of free and conditional free convolutions

14:20-15:10 H. Yoshida (Ochanomizu University)
Generalized q-deformed Gaussian random variable and its application