



17th Workshop: Noncommutative Probability

Lévy processes and operator algebras, with applications

Będlewo, July 24–30, 2016

TIMETABLE OF TALKS

Sunday, July 24

19:00 **Dinner**

Monday, July 25

08:00–09:00 **Breakfast**

09:00–09:40 **Dan Voiculescu (University of California, Berkeley)**
The commutant mod a normed ideal of an n -tuple of operators

09:45–10:25 **Anatolij Vershik (Steklov Institute of Mathematics, St. Petersburg)**
Filtration in the theory of AF-algebras and in Probability Theory

10:25–10:50 **Coffee break**

10:50–11:30 **Yuri Tomilov (IMPAN)**
Why do circles in the spectrum matter?

11:35–12:15 **Hari Bercovici (Indiana University)**
Conjectures related to the Connes embedding problem

12:20–13:00 **Eugene Lytvynov (Swansea University)**
Gauge-invariant quasi-free states on the algebra of the anyon commutation relations

13:15–14:15 **Lunch**

Room C 15:30–16:00

Jan Dereziński (University of Warsaw)

On almost homogeneous Schroedinger operators

Room C 16:00–16:30

Jan Stochel (Jagiellonian University, Kraków)

Exotic composition operators over directed graphs with one circuit.

Room A 15:30–16:00

Franz Lehner (Technische Universität Graz)

Some characterization problems in free probability

Room A 16:00–16:30

Jiun-Chau Wang (University of Saskatchewan)

Limit distributions in bi-free probability theory

16:30–17:00 **Coffee and cakes**

Room C 17:00–17:30

Il Bong Jung (Kyungpook National University)

A remark on the invariant subspace problem

Room C 17:30–18:00

Marek Ptak (University of Agriculture in Kraków)

Asymmetric truncated Toeplitz operators and their symbols (by Marek Ptak and Kamila Kliś–Garlicka)

Room C 18:00–18:30

Zenon Jabłoński (Jagiellonian University, Kraków)

Some properties of the Cauchy Dual of a 2-isometry

Room C 18:30–19:00

Michał Wojtylak (Jagiellonian University, Kraków)

On random perturbations of matrices and matrix polynomials (joint work with P. Pa-gacz, Jagiellonian University)

Room A 17:00–17:30

Wiktor Ejsmont (Wrocław University of Economics)

Restricted crossings of type B partitions

Room A 17:30–18:00

Octavio Arizmendi (Centro de Investigación en Matemáticas)

On Distance k-Graph of Star and Free Products of Graphs

Room A 18:00–18:30

Aurel Stan (Ohio State University)

Some inequalities for norms of Wick products

Room A 18:30–19:00

Nobuhiro Asai (Aichi University of Education)

Distribution of the field operator on the (α, q) -deformed Fock space

19:15–20:00 **Dinner**

Tuesday, July 26

08:00–09:00 **Breakfast**

09:00–09:40 **Joachim Cuntz (Mathematisches Institut Westfälische Wilhelms-Universität Münster)**
Left regular C^* -algebras for semigroups from number theory

09:45–10:25 **Michael Anshelevich (Texas A&M University)**
The exponential homomorphism in non-commutative probability.

10:25–10:50 **Coffee break**

10:50–11:30 **Nobuaki Obata (Tohoku University)**
Counting Walks in Graphs: A Quantum Probabilistic Approach

11:35–12:15 **Vadim Kaimanovich (University of Ottawa)**
Boundary behaviour of Thompson's group F

12:20–13:00 **Luigi Accardi (Universita degli Studi di Roma "Tor Vergata")**
Some follow ups of a joint paper with Marek Bożejko

13:15–14:15 **Lunch**

Room C 15:30–16:00

Kalyan Sinha (Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore)

Stop-Time in Fock Space and Markov CCR-Flows

Room C 16:00–16:30

Marie Choda (Osaka Kyoiku University)

Operational extreme points of completely positive maps

Room A 15:30–16:00

Gerhard Racher (Universität Salzburg)

On invariant operators

Room A 16:00–16:30

Romuald Lenczewski (Wrocław University of Technology)

Limit moments of product matrices of Wishart type

16:30–17:00 **Coffee and cakes**

Room C 17:00–17:30

Uwe Franz (Université de Franche-Comté, Besançon)

What is the Laplace operator on the free sphere?

Room C 17:30–18:00

Adam Skalski (Polish Academy of Sciences & University of Warsaw)

An application of conditionally free product of states to approximation properties of discrete quantum groups.

Room C 18:00–18:30

Un Cig Ji (Chungbuk National University)

Quantum Stochastic Integral Representations of Admissible White Noise Operators

Room C 18:30–19:00

Krzysztof Nowak (Drexel University, Philadelphia)

Low dimensional phase space parametrizations of reproducing formulae and orthonormal bases in space dimensions 1 and 2

Room A 17:00–17:30

Seung-Hyeok Kye (Seoul National University)

Separability of three qubit Greenberger-Horne-Zeilinger diagonal states

Room A 17:30–18:00

Izumi Ojima (Research Institute for Mathematical Sciences, Kyoto University)

Local Gauge Invariance in Algebraic QFT

Room A 18:00–18:30

Karol Życzkowski (Jagiellonian University, Kraków)

Average trace distance and Symmetrized Marchenko Pastur distribution

Room A 18:30–19:00

Franco Fagnola (Politecnico di Milano)

Structure of norm-continuous quantum Markov semigroups

19:30

Picture and Barbecue

Wednesday,	July 27
08:00–09:00	Breakfast
09:00–09:40	Gilles Pisier (Texas A&M University) Sidon sets in bounded orthonormal systems
09:45–10:25	Friedrich Götze (Bielefeld University) Asymptotic Approximations of Classical and Free Relative Entropy
10:25–10:50	Coffee break
10:50–11:30	Takahiro Hasebe (Hokkaido University) Free infinite divisibility for powers of random variables
11:35–12:15	Takeshi Hirai (Kyoto) Spin characters of finite and infinite generalized symmetric groups $G(m, 1, n), 4 \leq n \leq \infty$.
12:20–13:00	Piotr Śniady (Adam Mickiewicz University, Poznań) Dual cominatorics of Jack polynomials and graphs on surfaces
13:00–14:00	Lunch
14:00	Excursion to Rogalin
19:15–20:00	Dinner
20:00	Party in building B

Thursday,	July 28
08:00–09:00	Breakfast
09:00–09:30	Hiroaki Yoshida (Ochanomizu University, Tokyo) Remarks on the fluctuation moments of Wigner matrices
09:35–10:05	Włodek Bryc (University of Cincinnati) The local structure of q -Gaussian processes
10:10–10:40	Roland Speicher (Universität des Saarlandes) On deformations and independences
10:40–11:20	Coffee break
11:20–11:50	Michael Leinert (Ruprecht-Karls-Universität Heidelberg) Remarks on a result of Klaus Werner
11:55–12:25	Antoine Derighetti (EPFL) The extension property for the Fourier Algebra
12:30–13:00	Gero Fendler (Universität Wien) Symmetry of group algebras and inverse closed subalgebras of $B(H)$
13:15–14:15	Lunch
16:00–16:30	Coffee and cakes
16:30–18:15	Talks by Marek's Students
19:15	Banquet

Friday, July 29

08:00–09:45 **Breakfast**

09:45–10:25 **Fumio Hiai (Tohoku University)**
Reversibility of stochastic maps via quantum divergences

10:30–11:10 **Maciej Nowak (Jagiellonian University, Kraków)**
Diffusion of hermitian and non-hermitian Gaussian random matrices - unexpected links

11:10–11:35 **Coffee break**

11:35–12:15 **Florin Boca (University of Illinois at Urbana Champaign)**
Statistics of Farey fractions and distribution of eigenvalues in large sieve matrices

12:20–13:00 **Franciszek Hugon Szafraniec (Jagiellonian University, Kraków)**
The anatomy of coherent states

13:05–13:45 **Massimo Picardello (Universita degli Studi di Roma "Tor Vergata")**
Universal properties of harmonic functions on trees

14:00–15:00 **Lunch**

16:30–17:00 **Coffee and cakes**

Room C 17:00–17:30
Joachim Zacharias (University of Glasgow)
On embeddings of exact C^* -algebras into nuclear ones

Room C 17:30–18:00
Robin Hudson (Loughborough University)
Classical and quantum Lévy areas
(delivered by Andrzej Łuczak)

Room C 18:00–18:30
Michael Skeide (Universita degli Studi del Molise, Campobasso)
Freeness vs Monotone Independence; from Spatial Tensor Product Systems to Free Product Systems

Room A 17:00–17:30
Wilhelm von Waldenfels (Heidelberg)
Results in Spectral Schwartz Distributions

Room A 17:30–18:00
Vito Crismale (Universita degli Studi di Bari Aldo Moro)
Generalized ergodic properties for Yang-Baxter-Hecke quantisation

Room A 18:00–18:30
Noriyoshi Sakuma (Aichi University of Education)
Unimodality and selfdecomposability in classical and free probability

18:30–19:00 **Poster session**

19:15–20:00 **Dinner**

Saturday,	July 30
08:00–09:00	Breakfast
09:00–09:40	Adam Majewski (University of Gdańsk) Dynamical maps on non-commutative Orlicz spaces
09:45–10:25	Adam Paszkiewicz (University of Łódź) On divergent products of contractions – simple ideas in complicated constructions
10:25–10:50	Coffee break
10:50–11:20	Aljosa Peperko (University of Ljubljana) Inequalities on the spectral radius, operator norm and numerical radius of Hadamard weighted geometric mean of positive kernel operators
11:25–11:55	Biswarup Das (Mathematics Research Unit, University of Oulu) From compact semitopological quantum semigroups to compact quantum groups: Ellis joint continuity theorem
12:15	Lunch