

**15th WORKSHOP: NON-COMMUTATIVE HARMONIC ANALYSIS,
23-29.09.2012, Będlewo, Poland**

Sunday, September 23

19:00 **Dinner**

Monday, September 24

08:00–09:00 **Breakfast**

09:00–09:40 **Uffe Haagerup (University of Copenhagen)**
Approximation properties for groups and von Neumann algebras

09:45–10:25 **Takeshi Hirai (Kyoto)**
Gelfand-Raikov representations of Coxeter groups associated to positive definite norm functions

10:25–10:50 **Coffee break**

10:50–11:30 **Nobuaki Obata (Tohoku University)**
Localization of quantum walks on spidersnets

11:35–12:00 **Takahiro Hasebe (Kyoto University)**
Infinitesimals of natural independences

12:05–12:30 **Un Cig Ji (Chungbuk National University)**
Annihilation and Creation Derivatives on Operators on q -Fock Space

12:35–13:00 **Dmitriy Zanin (University of New South Wales, Sydney)**
Johnson-Schechtman inequalities in the free probability setting

13:00–14:00 **Lunch**

big 15:30–16:00

Eugene Lytvynov (Swansea University)

Determinantal point processes with J -Hermitian correlation kernels

big 16:05–16:35

Adam Majewski (University of Gdańsk)

On the structure of positive maps

small 15:30–16:00

Helene Airault (Université de Picardie Jules Verne, Inset & LAMFA)

Vector fields and Laplacians related to the infinitesimal representation of the symplectic group

small 16:05–16:35

Abdelhamid Boussejra (University Ibn Tofail, Morocco)

The Hua operators on Homogeneous Line Bundles on Bounded Symmetric Domains of Tube Type

16:35–17:10 **Coffee and cakes**

big 17:10–17:40

Anna Jencova (Slovak Academy of Sciences, Bratislava)

Generalized POVMs and measurements on quantum channels

big 17:45–18:15

Karol Penson (Université Pierre et Marie Curie, Paris 6)

Rational Raney distributions and Mellin transform with some bearings on free probability

small 17:10–17:40

Jan Hamhalter (Czech Technical University)

Affiliated subspaces, states, and structure of von Neumann algebras - joint work with E. Turilova (Kazan Federal University)

small 17:45–18:15

Dorota Kępa (Maria Curie-Skłodowska University, Lublin)

Coarse-graining and almost sure uniqueness of Gibbs fields on graphs

19:00–20:00 **Dinner**

20:00–21:00 **Baby Talk–Anatolij Vershik**

What does it mean “Asymptotic representation theory” and what was its history

Tuesday,	September 25
08:00–09:00	Breakfast
09:00–09:40	Gilles Pisier (Université Pierre et Marie Curie, Paris 6 & Texas A&M University) Operator space structures on L_p -spaces
09:45–10:25	Izumi Ojima (Research Institute for Mathematical Sciences, Kyoto University) Unification of four interactions in composition series
10:25–10:50	Coffee break
10:50–11:30	Robin Hudson (Loughborough University) A unitary operator determined by its subdiagonal part
11:35–12:00	Michał Wojciechowski (Polish Academy of Sciences, Warsaw) On the Wiener - Pitt sets
12:05–12:30	Yanqi Qiu (Université Paris VI) The OUMD property for column Hilbert space
12:35–13:00	Gero Fendler (University of Vienna) Aspects of Uncertainty: Eigenfunctions of the Fourier Transform with small Support
13:00–14:00	Lunch
15:00–15:25	Guy Salomon (Ben-Gurion University of the Negev) Topological convolution algebras
15:30–16:00	Daniel Alpay (Ben-Gurion University of the Negev) Non commutative linear system theory and white noise space theory
16:05–16:35	Romuald Lenczewski (Wrocław University of Technology) Limit distributions of the ensemble of Gaussian symmetric random blocks
16:35–17:10	Coffee and cakes
17:10–18:10	Poster session
19:00	Banquet

Wednesday, September 26

08:00–09:00 **Breakfast**

09:00–09:40 **Anatolij Vershik (Steklov Matematikal Institut of Russian Academy, St. Petersburg)**
Infinitesimal version of Schur-Weyl duality and Coxeter-Laplace operator

09:45–10:25 **Denes Petz (Budapest University of Technology and Economics)**
Matrix variances with projections

10:25–10:50 **Coffee break**

10:50–11:30 **Piotr Śniady (Polish Academy of Sciences, Warsaw)**
Jack deformation of characters of the symmetric groups

11:35–12:00 **Seung-Hyeok Kye (Seoul National University)**
On the structural physical approximation conjecture

12:05–12:30 **Hiroaki Yoshida (Ochanomizu University, Tokyo)**
On derivation of the relative free entropy and the Talagrand's inequality for the semi-circle law

12:35–13:05 **Hiroshi Ando (Kyoto University)**
Ultraproducts of von Neumann algebras

13:10–14:00 **Lunch**

14:00 **Excursion to Poznań**

16:35–17:10 **Coffee and cakes**

19:00–20:00 **Dinner**

20:00–21:00 **Baby Talk–Uffe Haagerup**
TBA

Thursday, September 27

08:00–09:00 **Breakfast**

09:00–09:40 **Karol Życzkowski (Jagiellonian University, Kraków)**
On numerical range and numerical shadow of a random matrix

09:45–10:25 **Maciej Nowak (Jagiellonian University, Kraków)**
Spectral shock waves in dynamical random matrix theories

10:25–10:50 **Coffee break**

10:50–11:30 **David Shoikhet (ORT Braude College, Karmiel)**
Asymptotic behavior of holomorphic flows rigidity and interpolation

11:35–12:00 **Zdzisław Burda (Jagiellonian University, Kraków)**
Universal microscopic correlation functions for products of independent Ginibre matrices

12:05–12:30 **Tim de Laat (University of Copenhagen)**
Approximation properties of noncommutative L_p -spaces associated with lattices in Lie groups

12:35–13:00 **Jiun-Chau Wang (University of Saskatchewan)**
Monotone Probability and Infinite Ergodic Theory

13:00–14:00 **Lunch**

big 15:30–16:00

Wiktor Ejsmont (University of Wrocław)

Characterizations of some free random variables

big 16:05–16:35

Carlos Vargas Obieta (Universität des Saarlandes)

Applications of operator-valued free probability to random matrix problems

small 15:30–16:00

Santanu Dey (Indian Institute of Technology Bombay)

Repeated interaction model with a subprocess

small 16:05–16:35

Bartosz Kwaśniewski (University of Białystok)

On transfer operators for C^* -dynamical systems

16:35–17:10 **Coffee and cakes**

big 17:10–17:40

Adam Paszkiewicz (University of Łódź)
 Projections in a Hilbert space, solution of Amemiya-Ando conjecture, maximal measurements

big 17:45–18:15

P.K. Das (Indian Statistical Institute, Kolkata)
 Optimal Control of Two-level Pauli Spin System with Weighted Energy Cost Functional

big 18:20–18:45

Hanna Podsekowska (University of Łódź)
 State determination and sufficiency of algebras

small 17:10–17:40

Jaeseong Heo (Hanyang University)
 Asymptotic derivations on C^* -algebras

small 17:45–18:15

Rachid El Harti (University Hassan I, Settat)
 Profinite $\text{pro-}C^*$ -algebras and $\text{pro-}C^*$ -algebras of profinite groups

small 18:20–18:45

Michał Wojtylak (Jagiellonian University, Kraków)
 On a class of H -selfadjoint random matrices with one eigenvalue of nonpositive type

19:00

Barbecue

Friday,	September 28
08:00–09:00	Breakfast
09:00–09:40	Jesse Peterson (Mathematics Department, Vanderbilt University) Stabilizers of ergodic actions of lattices and commensurators
09:45–10:25	Andrzej Łuczak (University of Łódź) Quantum Blackwell-Sherman-Stein theorem and related results
10:25–10:50	Coffee break
10:50–11:30	Ivan Nourdin (Université Henri Poincaré, Nancy 1) Chaos and the Fourth Moment
11:35–12:00	Uwe Franz (Université de Franche-Comté, Besançon) Heat semigroups on compact quantum groups
12:05–12:30	Hayato Saigo (Nagahama Institute of Bio-Science and Technology) New look at the Arcsine law and “Quantum-Classical Correspondence”
12:35–13:00	Aurel Stan (Ohio State University) Some inequalities about the norms of Poissonian Wick products. Joint work with Professor Alberto Lanconelli, University of Bari, Italy
13:00–14:00	Lunch
15:30–16:00	Naofumi Muraki (Iwate Prefectural University) Twisted independence for noncommutative random variables
16:05–16:35	Marek Bożejko (University of Wrocław) New non-commutative Gaussian processes and relation with random matrices and positive definite function on permutation (Coxeter) groups
16:35–17:10	Coffee and cakes
17:10–17:40	Malte Gerhold (Ernst-Moritz-Arndt-Universität Greifswald) Finite dimensional subproduct systems
17:45–18:15	Jacek Brodzki (University of Southampton) Subspaces of groups and generalised Pimsner-Voiculescu extensions
19:00–20:00	Dinner

Saturday, September 29

08:00–09:00 **Breakfast**

10:25–10:50 **Coffee break**

12:30 **Lunch**