

# International Conference

## “Dynamics, Combinatorics, Representations”

Euler International Mathematical Institute, Saint Petersburg

August 31 – September, 4, 2015

### Programme

#### Monday, August 31

<b>9:00-9:15</b>	<b>Registration</b>
<b>9:15-9:30</b>	<b>Opening</b>
<b>9:30-10:20</b>	<b>G.Olshanski.</b> The extended Gelfand-Tsetlin graph, its $q$ -boundary, and $q$ -hypergeometric determinantal measures.
10:20-10:50	<i>Coffee break</i>
<b>10:50-11:40</b>	<b>V.Gorin.</b> Central Limit Theorem for discrete log-gases.
<b>11:50-12:40</b>	<b>N.Nessonov.</b> Stable spin-representations of the infinite symmetric group.
<b>12:40-14:10</b>	<b>Lunch</b>
<b>14:10-15:00</b>	<b>A. Malyutin.</b> Eigenfunctions of Laplace operators and exit boundaries.
<b>15:10-16:00</b>	<b>A.Gamburd.</b> Markoff Triples and Strong Approximations.
16:00-16:30	<i>Coffee break</i>
<b>16:30-17:20</b>	<b>C.Malyshev.</b> Combinatorial aspects of correlation functions of Heisenberg chain in the limiting cases.
<b>17:30-...</b>	<b>Welcome party (in the Euler Institute)</b>

## Tuesday, September 1

<b>9:30-10:20</b>	<b>B.Gurevich.</b> Toward history of dynamical entropy: comparing two definitions.
10:20-10:50	<i>Coffee break</i>
<b>10:50-11:40</b>	<b>A.Vershik.</b> Standard and non-standard filtrations in dynamics and combinatorics. Attempt of classification.
<b>11:50-12:40</b>	<b>J.-P.Thouvenot.</b> The f metric revisited.
<b>12:40-14:10</b>	<b>Lunch</b>
<b>14:10-15:00</b>	<b>Y. Neretin.</b> Infinite symmetric group and combinatorial constructions of topological field theory type.
<b>15:10-16:00</b>	<b>T.Smirnova-Nagnibeda.</b> Substitutional dynamics associated with some self-similar groups.
16:00-16:30	<i>Coffee break</i>
<b>16:30-16:55</b>	<b>P. Zatitskiy.</b> On scaling entropy sequence of a metric dynamical system.
<b>17:00-17:25</b>	<b>A. Minabutdinov.</b> The limiting curves for the Pascal adic transformation.

## Wednesday, September 2

<b>9:30-10:20</b>	<b>I. Zhdanovskiy.</b> Mutually unbiased bases in dimension 6.
10:20-10:50	<i>Coffee break</i>
<b>10:50-11:40</b>	<b>B. Hayes.</b> Fuglede-Kadison Determinants and Sofic Entropy.
<b>11:50-12:15</b>	<b>A. Alpeev.</b> Independence of sofic entropy on sofic approximation for a class of measure-preserving systems.
<b>12:20-12:45</b>	<b>P. Nikitin.</b> Two semigroups connected with the infinite symmetric group, their representations and random walk on Bratteli diagrams.
<b>12:45-14:00</b>	<b>Lunch</b>
<b>14:00-...</b>	<b>Bus excursion</b> (departs from the "Andersen" Hotel)

## Thursday, September 3

<b>9:30-10:20</b>	<b>G. Panina.</b> Discrete Morse theory for moduli spaces of exible polygons, or solitaire game on the circle.
10:20-10:50	<i>Coffee break</i>
<b>10:50-11:40</b>	<b>G. Amosov.</b> On the noncommutative deformation of the Klein group associated with a quantum channel.
<b>11:50-12:40</b>	<b>E. Verbitskiy.</b> Spanning Trees, Sandpiles, and Algebraic Dynamics.
<b>12:40-14:10</b>	<b>Lunch</b>
<b>14:10-15:00</b>	<b>S. Skripchenko.</b> Systems of isometries: dynamics, combinatorics, topology.
<b>15:10-16:00</b>	<b>A. Kuznetsova.</b> On the structure of C*-algebra generated by a family of partial isometries and multipliers.
16:00-16:30	<i>Coffee break</i>
<b>16:30-17:20</b>	<b>V. Kaimanovich.</b> Stopping times and Poisson bound-aries.
<b>18:00-...</b>	<b>Conference Dinner in the Euler Institute</b>

## Friday, September 4

<b>9:30-10:20</b>	<b>F. Petrov.</b> Duality for virtual continuous functions and optimal transportation.
10:20-10:50	<i>Coffee break</i>
<b>10:50-11:40</b>	<b>V. Bogachev.</b> On the equality of the values in the Monge and Kantorovich problems.
<b>11:50-12:40</b>	<b>K. Kokhas.</b> Urban renewal revisited.
<b>12:40-14:10</b>	<b>Lunch</b>
<b>14:10-15:00</b>	<b>N. Tsilevich.</b> The serpentine representation of the infinite symmetric group and the basic representation of the affine Lie algebra $sl^2$ .
<b>15:10-16:00</b>	<b>A. Bufetov.</b> Quasi-Symmetries of Determinantal Point Processes.
16:00-16:30	<i>Coffee break</i>
<b>16:30-17:20</b>	<b>P. Zograf.</b> Map enumeration revisited.

