

G2S2-Program

All scientific activities will be held in Novosibirsk State University, Pirogova 1, Conference room 3307

Monday, August 15

09:00 - 18:00 Registration: *Hall of Conference room 3307*
19:00 - 21:00 Welcome party: *Hall of Conference room 3307*

Tuesday, August 16

07:30 - 09:45 *Breakfast*
PhD-Master Summer School: Minicourse 1
Chair: Yaokun Wu
10:00 - 10:50 Lih Hsing Hsu: *Lecture 1*
11:00 - 11:50 Lih Hsing Hsu: *Lecture 2*
11:50 - 12:10 *Coffee break*
PhD-Master Summer School: Minicourse 2
Chair: Mikhail Muzychuk
12:10 - 13:00 Ted Dobson: *Lecture 1*
13:00 - 14:30 *Lunch*
14:30 - 15:20 Ted Dobson: *Lecture 2*
15:20 - 16:00 *Coffee break*
Conference: Contributed talks
Chair: Denis Krotov
16:00 - 16:25 Sergey Goryainov: *New construction of Deza graphs*
16:30 - 16:55 Leonid Shalaginov: *On Deza graphs with disconnected second neighbourhoods of vertices*
17:00 - 17:25 Vladislav Kabanov: *On Deza graphs with parameters $(v, k, k-1, a)$*
17:30 - 17:50 Anastasiya Mityanina: *On claw-free strictly Deza graphs*
17:50 - 18:10 *Coffee break*
18:10 - 18:35 Stefan Gyürki: *A construction of infinite families of directed strongly regular graphs*
18:35 - 19:00
19:00 - 20:00 *Dinner*
20:00 - 22:00 **Problem solving: Minicourse 1**
Chair: Natalia Maslova

Wednesday, August 17

- 07:30 - 09:45 *Breakfast*
- PhD-Master Summer School: Minicourse 1**
Chair: Yaokun Wu
- 10:00 - 10:50 Lih Hsing Hsu: *Lecture 3*
- 11:00 - 11:50 Lih Hsing Hsu: *Lecture 4*
- 11:50 - 12:10 *Coffee break*
- PhD-Master Summer School: Minicourse 2**
Chair: Mikhail Muzychuk
- 12:10 - 13:00 Ted Dobson: *Lecture 3*
- 13:00 - 14:30 *Lunch*
- 14:30 - 15:20 Ted Dobson: *Lecture 4*
- 15:20 - 16:00 *Coffee break*
- Conference: Contributed talks**
Chair: Sergey Goryainov
- 16:00 - 16:25 Anatoly Kondrat'ev: *Finite groups whose prime graphs do not contain triangles*
- 16:30 - 16:55 Natalia Maslova: *On realizability of some graphs as Gruenberg–Kegel graphs of finite groups*
- 17:00 - 17:25 Maria Zvezdina: *On the spectra of automorphic extensions of finite simple exceptional groups of Lie type*
- 17:30 - 17:50 Viktor Zenkov: *A criterion of unbalance of some simple groups of Lie type*
- 17:50 - 18:10 *Coffee break*
- 18:10 - 18:35 Anton Baykalov: *Intersection of conjugate solvable subgroups in classical groups of Lie type*
- 18:35 - 19:00
- 19:00 - 20:00 *Dinner*
- 20:00 - 22:00 **Problem solving: Minicourse 2**
Chair: Sergey Goryainov

Thursday, August 18

- 07:30 - 09:45 *Breakfast*
Conference: Invited Talks
Chair: Alexander A. Ivanov
- 10:00 - 10:50 Dragan Marušič: *On even-closedness of vertex-transitive graphs*
11:00 - 11:50 Klavdija Kutnar: *On colour-preserving automorphisms of Cayley graphs*
11:50 - 12:10 *Coffee break*
Chair: Dragan Marušič
- 12:10 - 13:00 Mikhail Muzychuk: *Isomorphism problem for Cayley combinatorial objects*
13:00 - 13:15 **Conference Photo**
13:15 - 14:30 *Lunch*
14:30 - 15:20 Yaokun Wu: *The lit-only σ -game and some mathematics around*
15:20 - 16:00 *Coffee break*
Chair: Klavdija Kutnar
- 16:00 - 16:50 Tatsuro Ito: *Towards the classification of $(P$ and Q)-polynomial association schemes*
17:00 - 17:50 Jack Koolen: *Applications of Hoffman graphs*
17:50 - 18:10 *Coffee break*
18:10 - 19:00 Alexander Gavrilyuk: *On characterization of the Grassmann graphs $J_2(2d + 2, d)$*
19:00 - 20:00 *Dinner*
20:00 - 22:00 **Basketball/Volleyball, NSU Sports Complex**

Friday, August 19

- 07:30 - 09:45 *Breakfast*
- PhD-Master Summer School: Minicourse 1**
Chair: Yaokun Wu
- 10:00 - 10:50 Lih Hsing Hsu: *Lecture 5*
- 11:00 - 11:50 Lih Hsing Hsu: *Lecture 6*
- 11:50 - 12:10 *Coffee break*
- PhD-Master Summer School: Minicourse 2**
Chair: Mikhail Muzychuk
- 12:10 - 13:00 Ted Dobson: *Lecture 5*
- 13:00 - 14:30 *Lunch*
- 14:30 - 15:20 Ted Dobson: *Lecture 6*
- 15:20 - 16:00 *Coffee break*
- Conference: Contributed talks**
Chair: Maria Zvezdina
- 16:00 - 16:25 Farzaneh Gholaminezhad: *Structure and Automorphism group of Involution G-Graphs and Cayley Graphs*
- 16:30 - 16:55 Nikolai Minigulov: *On 3-generated lattices with standard and dual standard elements among generators*
- 17:00 - 17:25 Hamid Reza Golmohammadi: *Improving some bounds for multiple domination parameters in graphs*
- 17:30 - 17:50 Anna Simonova: *Small cycles in the Bubble-Sort graph*
- 17:50 - 18:10 *Coffee break*
- 18:10 - 18:35 Swamy Narayan: *Some Class of golden graphs and its construction*
- 18:35 - 19:00
- 19:00 - 20:00 *Dinner*
- 20:00 - 22:00 **Problem solving: Minicourse 1**
Chair: Natalia Maslova

Saturday, August 20

- 07:30 - 09:45 *Breakfast*
PhD-Master Summer School: Minicourse 1
Chair: Yaokun Wu
- 10:00 - 10:50 Lih Hsing Hsu: *Lecture 7*
11:00 - 11:50 Lih Hsing Hsu: *Lecture 8*
11:50 - 12:10 *Coffee break*
PhD-Master Summer School: Minicourse 2
Chair: Mikhail Muzychuk
- 12:10 - 13:00 Ted Dobson: *Lecture 7*
13:00 - 14:30 *Lunch*
14:30 - 15:20 Ted Dobson: *Lecture 8*
15:20 - 16:00 *Coffee break*
Conference: Contributed talks
Chair: Patric Östergård
- 16:00 - 16:25 Sho Kubota: *Strongly regular graphs with the same parameters as the symplectic graph*
16:30 - 16:55 Ivan Mogilnykh: *Propelinear codes from multiplicative group of $GF(2^m)$*
17:00 - 17:25 Anastasiya Gorodilova: *The linear spectrum of a quadratic APN function and related open problems*
17:30 - 17:50 Vladimir Potapov: *On the number of n -ary quasigroups, Latin hypercubes and MDS codes*
17:50 - 18:10 *Coffee break*
18:10 - 18:30 Anastasia Vasil'eva: *On Fourier decomposition of Preparata-like codes in the graph of the hypercube*
18:35 - 19:00 Anna Taranenko: *On transversals in completely reducible quasigroups and in quasigroups of order 4*
19:00 - 20:00 *Dinner*
20:00 - 22:00 **Problem solving: Minicourse 2**
Chair: Sergey Goryainov

Sunday, August 21

- 07:30 - 09:45 *Breakfast*
- Conference: Invited Talks**
Chair: Denis Krotov
- 10:00 - 10:50 Akihiro Munemasa: *Triply even codes obtained from some graphs and finite geometries*
- 11:00 - 11:50 Patric Östergård: *Is there a $(4, 27, 2)$ partial geometry?*
- 11:50 - 12:10 *Coffee break*
Chair: Jack Koolen
- 12:10 - 13:00 Lev Kazarin: *Group factorizations, graphs and characters of groups*
- 13:00 - 14:30 *Lunch*
- 14:30 - 15:20 Andrey Vasil'ev: *Testing isomorphism of central Cayley graphs over an almost simple groups in polynomial time*
- 15:20 - 16:00 *Coffee break*
Conference: Special session
Chair: Andrey Vasil'ev
- 16:00 - 17:00 Ilia Ponomarenko: *Graph isomorphism in quasipolynomial time (L. Babai, 2015)*
- 17:00 - 19:00 *Discussions*
- 19:00 - 22:00 *Conference dinner*

Monday, August 22

Excursions/ Sport Activities

Tuesday, August 23

- 07:30 - 09:45 *Breakfast*
- PhD-Master Summer School: Minicourse 3**
Chair: Akihiro Munemasa
- 10:00 - 10:50 Alexander A. Ivanov: *Lecture 1*
- 11:00 - 11:50 Alexander A. Ivanov: *Lecture 2*
- 11:50 - 12:10 *Coffee break*
- PhD-Master Summer School: Minicourse 4**
Chair: Alexander Mednykh
- 12:10 - 13:00 Bojan Mohar: *Lecture 1*
- 13:00 - 14:30 *Lunch*
- 14:30 - 15:20 Bojan Mohar: *Lecture 2*
- 15:20 - 16:00 *Coffee break*
- Conference: Contributed talks**
Chair: Natalia Maslova
- 16:00 - 16:25 Madeleine Whybrow: *Majorana Representations of Triangle-Point Groups*
- 16:30 - 16:55 Dmitry Churikov: *Automorphism groups of cyclotomic schemes over finite near-fields*
- 17:00 - 17:25 Olga Kravtsova: *The structure of Hentzel-Rúa semifield of order 64*
- 17:30 - 17:50 Ilya Matkin: *New infinite family of Cameron-Liebler line classes*
- 17:50 - 18:10 *Coffee break*
- 18:10 - 18:30 Alexey Shlepin: *About group density function*
- 18:35 - 19:00 Ruslan Skuratovskii: *Minimal generating systems and structure of Sylow 2-subgroups of alternating groups Syl_2A_{2k} and Syl_2A_n*
- 19:00 - 20:00 *Dinner*
- 20:00 - 22:00 **Problem solving: Minicourse 3**
Chair: Natalia Maslova

Wednesday, August 24

- 07:30 - 09:45 *Breakfast*
PhD-Master Summer School: Minicourse 3
Chair: Akihiro Munemasa
- 10:00 - 10:50 Alexander A. Ivanov: *Lecture 3*
11:00 - 11:50 Alexander A. Ivanov: *Lecture 4*
11:50 - 12:10 *Coffee break*
PhD-Master Summer School: Minicourse 4
Chair: Alexander Mednykh
- 12:10 - 13:00 Bojan Mohar: *Lecture 3*
13:00 - 14:30 *Lunch*
14:30 - 15:20 Bojan Mohar: *Lecture 4*
15:20 - 16:00 *Coffee break*
Conference: Contributed talks
Chair: Shaofei Du
- 16:00 - 16:25 Keiji Ito: *Maximum skew energy of tournaments*
16:30 - 16:55 Mukesh Kumar Nagar: *A q and q, t -analogue of Hook Immanantal Inequalities and Hadamard Inequality for Trees*
17:00 - 17:25 Michele Mulazzani: *4-colored graphs and complements of knots and links*
17:30 - 17:50 Roman Panenko: *Φ -Harmonic Functions on Graphs*
17:50 - 18:10 *Coffee break*
18:10 - 18:30
18:35 - 19:00
19:00 - 20:00 *Dinner*
20:00 - 22:00 **Problem solving: Minicourse 4**
Chair: Sergey Goryainov

Thursday, August 25

- 07:30 - 09:45 *Breakfast*
Conference: Invited Talks
Chair: Alexander Gavrilyuk
- 10:00 - 10:50 Anton Betten: *Graphs with Integral Spectrum*
- 11:00 - 11:50 Yuriy Tarannikov: *On plateaued Boolean functions with the same spectrum support*
- 11:50 - 12:10 *Coffee break*
Chair: Roman Nedela
- 12:10 - 13:00 Jin Ho Kwak: *Notes on zeta functions of regular graphs*
- 13:00 - 13:15 **Conference Photo**
- 13:15 - 14:30 *Lunch*
- 14:30 - 15:20 Shaofei Du: *2-Arc-Transitive Regular Covers*
- 15:20 - 16:00 *Coffee break*
Chair: Mitsugu Hirasaka
- 16:00 - 16:50 Iliia Ponomarenko: *On characterizations of association schemes by intersection numbers*
- 17:00 - 17:50 Matan Ziv-Av: *A family of regular coherent non-Schurian graphs, related to extremal graph theory*
- 17:50 - 18:10 *Coffee break*
Chair: Alexander Mednykh
- 18:10 - 20:00 **Conference: Open problems session**
- 20:00 - 22:00 **Basketball/Volleyball, NSU Sports Complex**

Friday, August 26

- 08:30 - 09:45 *Breakfast*
PhD-Master Summer School: Minicourse 3
Chair: Akihiro Munemasa
- 10:00 - 10:50 Alexander A. Ivanov: *Lecture 5*
11:00 - 11:50 Alexander A. Ivanov: *Lecture 6*
11:50 - 12:10 *Coffee break*
PhD-Master Summer School: Minicourse 4
Chair: Alexander Mednykh
- 12:10 - 13:00 Bojan Mohar: *Lecture 5*
13:00 - 14:30 *Lunch*
14:30 - 15:20 Bojan Mohar: *Lecture 6*
15:20 - 16:00 *Coffee break*
Conference: Contributed talks
Chair: Matan Ziv-Av
- 16:00 - 16:25 Grigory Ryabov: *On the isomorphism problem for Cayley graphs over abelian p -groups*
16:30 - 16:55 Sven Reichard: *Schur rings over elementary abelian two-groups*
17:00 - 17:25 Alexandr Valyuzhenich: *Minimal supports of eigenfunctions of Hamming graphs*
17:30 - 17:50 Konstantin Kobylkin: *Computational complexity of Vertex Cover and related problems for highly connected*
17:50 - 18:10 *Coffee break*
18:10 - 18:30 Ilya Mednykh: *Circulant graphs and Jacobians*
18:35 - 19:00
19:00 - 20:00 *Dinner*
20:00 - 22:00 **Problem solving: Minicourse 3**
Chair: Natalia Maslova

Saturday, August 27

- 08:30 - 09:45 *Breakfast*
PhD-Master Summer School: Minicourse 3
Chair: Akihiro Munemasa
- 10:00 - 10:50 Alexander A. Ivanov: *Lecture 7*
11:00 - 11:50 Alexander A. Ivanov: *Lecture 8*
11:50 - 12:10 *Coffee break*
PhD-Master Summer School: Minicourse 4
Chair: Alexander Mednykh
- 12:10 - 13:00 Bojan Mohar: *Lecture 7*
13:00 - 14:30 *Lunch*
14:30 - 15:20 Bojan Mohar: *Lecture 8*
15:20 - 16:00 *Coffee break*
Conference: Contributed talks
Chair: Tatsuro Ito
- 16:00 - 16:25 Yuhei Inoue: *The four color theorem and Thompson's F*
16:30 - 16:55 Aleksey Glebov: *Splitting planar graphs of bounded girth to subgraphs with short paths*
17:00 - 17:25 Igor Bykov: *Completeness of hamiltonian cycle in halved cube*
17:30 - 17:50 Somayeh Heydari: *Some simple groups which are determined by their character degree graphs*
17:50 - 18:10 *Coffee break*
18:10 - 18:30
18:35 - 19:00 Irina Starikova: *Mathematical Beauty*
19:00 - 20:00 *Dinner*
20:00 - 22:00 **Problem solving: Minicourse 4**
Chair: Sergey Goryainov

Sunday, August 28

- 08:30 - 09:45 *Breakfast*
Conference: Invited Talks
Chair: Elena Konstantinova
- 10:00 - 10:50 Mitsugu Hirasaka: *Congruence of triangles in a metric space*
11:00 - 11:50 Roman Nedela: *Hamilton Cycles in Graphs Embedded into Surfaces*
11:50 - 12:10 **Closing**