

## 2019 Ural Workshop on Group Theory and Combinatorics

Yekaterinburg, Russia, March 22-24, 2019

All scientific activities take place at Ural Federal University.

Address: Room 611, 4 Turgeneva St., Yekaterinburg, Russia.

### Friday, March 22

**10:00-10:50** Stephen Glasby (The University of Western Australia, Perth, Australia): *Arc transitive digraphs and composition factors of completely reducible linear groups*

**11:00-11:50** Alexander Makhnev (Krasovskii Institute of Mathematics and Mechanics and Ural Federal University, Yekaterinburg, Russia): *Distance-regular graphs and their automorphisms*

**11:50-12:10** *Coffee-break*

**12:10-13:00** Vladimir Trofimov (Krasovskii Institute of Mathematics and Mechanics and Ural Federal University, Yekaterinburg, Russia): *Vertex stabilizers of graphs with primitive automorphism groups and a strong version of the Sims conjecture*

**13:10-14:00** Vladislav Kabanov (Krasovskii Institute of Mathematics and Mechanics, Yekaterinburg, Russia): *On eigenfunctions of the Star graphs*

**14:00-15:30** *Lunch*

**15:30-16:20** Mikhail Volkov (Ural Federal University, Yekaterinburg, Russia): *Completely Reachable Automata: an interplay between transformation semigroups, finite automata, and binary trees*

**16:30-17:20** Arseny Shur (Ural Federal University, Yekaterinburg, Russia): *Factor Complexity vs Power Avoidance*

**17:30-18:00** Elena Petrova (Ural Federal University, Yekaterinburg, Russia): *Restivo problems in repetition-free words*

### Saturday, March 23

**10:00-10:50** Alexandre Zalesski (University of East Anglia, Norwich, UK): *Eigenvalue 1 of semisimple elements in modular representations of classical groups*

**11:00-11:50** Anatoly Kondrat'ev (Krasovskii Institute of Mathematics and Mechanics, Yekaterinburg, Russia): *Gruenberg-Kegel graphs and their applications*

**11:50-12:10** *Coffee-break*

**12:10-13:00** Natalia Maslova (Krasovskii Institute of Mathematics and Mechanics and Ural Federal University, Yekaterinburg, Russia): *On coincidence of Gruenberg-Kegel graphs of non-isomorphic finite groups*

**13:10-13:40** Marianna Zinovieva (Krasovskii Institute of Mathematics and Mechanics and Ural Federal University, Yekaterinburg, Russia): *On non-isomorphic finite nonabelian simple groups whose Gruenberg-Kegel graphs coincide*

**13:40-15:00** *Lunch*

**15:00-15:50** Akihiro Munemasa (Tohoku University, Sendai, Japan): *Krein conditions for coherent configurations*

**16:00-16:50** Yuta Watanabe (National Institute of Technology, Ube College, Ube, Japan): *An algebra associated with projective geometry and its relation to the quantum affine algebra*

**17:00-17:30** Keiji Ito (Tohoku University, Sendai, Japan): *Characters of finite permutation groups and Krein parameters*

### Sunday, March 24

#### Excursions