



# Mal'tsev Meeting '09

Sobolev Institute of Mathematics, 4 pr. Akad. Koptyuga, 630090 Novosibirsk, Russia  
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## Programme of Mal'tsev Meeting

### **August 23, Sunday**

Arrival day. Registration of participants at the foyer of the hotel (5 p.m. till 8 p.m.).

### **August 24, Monday**

Registration of participants at the foyer of the House of scientists (9 a.m. till 2:30 p.m.)

House of scientists, Large hall

**10:00 Opening of the conference**

**10:30 Plenary session** (chair: Sergei Goncharov)

**10:30** Yu. L. Ershov. *On a way from logic to algebra*

**11:20** Coffee break

**12:00** S. I. Adian. *The Burnside problem and related topics*

**13:00** A. Nerode. *Recurrence systems on arbitrary multisorted structures and their associated update transducers: Modeling reasoning and computation in networks and distributed databases*

**13:50** Lunch break

**15:20 Plenary session** (chair: Yurii Ershov)

**15:20** D. Scott. *Boolean-valued analysis and modal logic*

**16:20** L. L. Maksimova. *Algebraic approach to non-classical logic*

House of scientists, Small hall

**17:00 Special session dedicated to the memory of Anatolii I. Mal'tsev** (chair: Igor' Lavrov)

### **August 25, Tuesday**

Sobolev Institute of Mathematics

**9:00 Plenary session** (chair: Vladimir Remeslennikov)

**9:00** V. D. Mazurov. *Groups with prescribed sets of orders of elements*

**10:00** L. A. Shemetkov. *Formation algebra*

**10:50** Coffee break

**11:30 Plenary session** (chair: Dana Scott)

**11:30** M. Vardi. *Constraints, graphs, algebra, logic, and complexity*

**12:30** S. S. Goncharov. *Developing Mal'tsev's ideas in numbering theory and computable model theory*

**13:20** Lunch break

**15:00 Plenary session** (chair: Andrei Morozov)

**15:00** A. Macintyre. *Exponential fields — Algebra and analysis*

**16:00 Contributions in sections**

Group theory-1

Ring theory-1

Computability theory

Group theory-2

Model theory

Non-classical logics

Group theory-3

Universal algebra

INF's canteen

**18:30** Conference dinner

## **August 26, Wednesday**

Sobolev Institute of Mathematics

**9:00 Plenary session** (chair: Viktor Mazurov)

**9:00** A. V. Mikhalev and E. I. Bunina. *Model theoretical methods in the theory of rings and linear groups: Elementary equivalence and orthogonal completeness*

**10:00** O. Kharlampovich and A. Miasnikov. *Model theory for fully residually free and similar groups*

**10:50** Coffee break

**11:30 Plenary session** (chair: A. Nerode)

**11:30** B. Khoussainov. *Automatic structures: Proving non-automaticity*

**12:30** J. Knight. *Turing computable embeddings*

**13:20** Lunch break and free time

## **August 27, Thursday**

Sobolev Institute of Mathematics

**9:00 Plenary session** (chair: J.Knight)

**9:00** M. M. Arslanov. *Model-theoretic aspects of the non-computable universe*

**10:00** A. S. Morozov. *Automorphism spectra of computable structures*

**10:50** Coffee break

**11:30 Plenary session** (chair: Alexei Miasnikov)

**11:30** M. V. Semenova. *Embedding lattices into derived lattices*

**12:30** V. N. Remeslennikov. *Limit algebraic structures and algebra-geometrical boundary*

**13:20** Lunch break

**15:00 Plenary session** (chair: Evgenii Palyutin)

**15:00** S. Wainer. *Computing bounds from (arithmetical) proofs*

**16:00** S. V. Sudoplatov. *Distributions of countable models of small theories*

**16:45 Contributions in sections**

Group theory-1	Ring theory-1	Computability theory
Group theory-2	Ring theory-2	Non-classical logics
Group theory-3	Model theory and universal algebra	

**August 28, Friday**

Sobolev Institute of Mathematics

**9:00 Plenary session** (chair: Bakhadyr Khoussainov)

**9:00** D. Normann. *Computations and functionals of finite types*

**10:00** I. Soskov. *The  $\omega$ -enumeration degrees*

**10:50** Coffee break

**11:30 Plenary session** (chair: Olga Kharlampovich)

**11:30** B. Zilber. *On model theory, noncommutative geometry and physics*

**12:30** N. S. Romanovskii. *Algebraic geometry over solvable groups*

**13:20** Lunch break

**15:00 Plenary session** (chair: Dag Normann)

**15:00** U. Kohlenbach. *Recent applications of proof theory to core mathematics*

**16:00** K. Weihrauch. *Computable separation in topology*

**16:45 Contributions in sections**

Group theory-1	Ring theory-1	Computability theory
Group theory-2	Ring theory-2	Non-classical logics
Group theory-3	Model theory and universal algebra	Philosophy of mathematics

**18:30 Closing of the conference**

**August 29, Saturday**

Departure day.