

REPORT ON YURIFEST 2025

Festschrift Conference in Honour of Yuri Gurevich

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YURIFEST 2025, a conference aimed to honor the 85th anniversary of Prof Yuri Gurevich, and his outstanding contributions towards advancing logic and computer science took place in Munich from 20 June to 22 June, 2025. The conference was organized by Guillermo Badia (University of Queensland, Australia) and Martin Wirsing (Ludwig-Maximilians-Universität München).

Gurevich's interests have spanned a broad spectrum of logic and computer science, including decision procedures, the monadic theory of order, abstract state machines, formal methods, foundations of computer science, privacy and security, quantum computing, and much more. Many of these areas were reflected in the topics of the symposium.

A broad range of topics in logic and computer science was covered by the following invited talks:

1. *Etienne Grandjean* (University of Caen, France). “How does preprocessing make it possible to obtain constant time?”
2. *Alexander Shen* (CNRS, France). “All Kolmogorov complexity functions are optimal, but are some more optimal?”
3. *Nachum Dershowitz* (Tel Aviv University, Israel). “Graphical Operational Semantics”
4. *Wolfgang Reisig* (Humboldt-Universität Berlin, Germany). “Reflections about Yuri's Abstract State Machines”
5. *Philip Hieronymi* (Bonn University, Germany). “A strong version of Cobham's theorem”
6. *Vladimir Lifschitz* (University of Texas, Austin, USA). “Verifying equivalence of declarative programs”
7. *Andrei A. Bulatov* (Simon Fraser University, Canada). “Commutative vs non-commutative CSP”
8. *Janos Makowsky* (Technion, Israel). “Supercongruences for Integer Sequences.”
9. *Arnon Avron* (Tel Aviv University, Israel). “Predicative Set Theory and Predicative Analysis”

10. **Valentin Goranko** (Stockholm University, Sweden). “Almost sure theories of fragments of monadic second-order logic”
11. **Sven Manthe** (Bonn University, Germany). “The Borel monadic theory of order is decidable”
12. **Alexander Rabinovitch** (Tel Aviv University, Israel). “Rabin Uniformization Problem with Restricted Domain Variables”
13. **Andreas Blass** (University of Michigan, USA). “Infinite games, realistic games, and game semantics”
14. **Manfred Droste** (Universität Leipzig, Germany). “Random constructions imply symmetry”
15. **Ronald de Wolf** (CWI, Amsterdam, The Netherlands). “Quantum Proofs for Classical Theorems”
16. **Bertrand Meyer** (Constructor Institute of Technology, Switzerland). “A new PRISM Programming Really Is Simple Mathematics”
17. **Stefan Schmid** (Technical University, Berlin, Germany). “Self-adjusting Topologies”
18. **Yuri Gurevich** (University of Michigan, USA). “The nature of nondeterministic (probabilistic, quantum, etc.) algorithms”

Details of the program and recordings of talks can be found on the website <https://sites.google.com/view/yurifest2025/home?authuser=0>.

There was an informal get together on 19 June at Beergarden, Wirtshaus and a conference dinner on 21 June at Augustiner am Dom.