

**ASSOCIATION FOR SYMBOLIC LOGIC
2003 ANNUAL MEETING**

University of Illinois at Chicago, June 1–4, 2003

REVISED PROGRAM

Program Committee: John Baldwin, Andreas Blass (Chair), Timothy Carlson, W. D. Hart, Denis Hirschfeldt, David MacQueen, Donald Monk.

Local Organizing Committee: Willem Blok, W. D. Hart (Chair), William Howard, David Marker.

Please see <http://www.math.uic.edu/~marker/asl-03> for updated information.

All talks are in Chicago Circle Center, Third Floor Conference Area (750 South Halsted Street, Chicago, IL 60607). The registration desk will be located in Fort Dearborn Room A and the book exhibits will be located in the Monarch Room.

SUNDAY, JUNE 1, Chicago Circle Center

Morning, Cardinal Room

- 8:00 – 8:20 Coffee
8:20 – 8:30 Opening Remarks
8:30 – 9:30 Invited Lecture: **Phokion Kolaitis** (University of California, Santa Cruz), *Constraint satisfaction, finite-variable logics, and treewidth*.
9:40 – 10:30 Tutorial: **Jack Lutz** (Iowa State University), *Kolmogorov Complexity, I*.
10:40 – 11:40 Fourteenth Annual Gödel Lecture: **Boris Zilber** (Oxford University), *Categoricity*.
11:50 – 12:35 Contributed Talks, Sessions 1, 2, 3, 4: *See page 5*.
12:45 – 1:50 Reception. Illinois Room A.

Afternoon, Cardinal Room

- 2:00 – 3:00 Invited Lecture: **Don Pigozzi** (Iowa State University), *Abstract algebraic logic and the algebraic hierarchy*.

Special Session on Algebraic Logic and Universal Algebra (A)
White Oak Room

- 3:45 – 4:10 **Matt Valeriote** (McMaster University), *Definable principal congruences and solvability*.
4:15 – 4:40 **Ágnes Szendrei** (University of Szeged), *Clones closed under conjugation*.
4:45 – 5:10 **Keith Kearnes** (University of Colorado, Boulder), *To be announced*.
5:15 – 5:40 **Ross Willard** (University of Waterloo), *To be announced*.

Special Session on Computability Theory and Effective Mathematics (A)
Illinois Room C

- 3:45 – 4:10 **Carl Jockusch** (University of Illinois, Urbana-Champaign), *The logical strength and effective content of the Thin Set Theorem and the Free Set Theorem.*
- 4:15 – 4:40 **Timothy H. McNicholl** (University of Dallas), *Automorphisms of the c. e. weak truth-table degrees.*
- 4:45 – 5:10 **Peter Cholak** (University of Notre Dame), *On the complexity of orbits in \mathcal{E}^* .*
- 5:15 – 5:40 **Reed Solomon** (University of Notre Dame), *On the filter of computably enumerable supersets of an r -maximal set.*

Special Session on Model Theory (A)
Cardinal Room

- 3:45 – 4:10 **Chris Miller** (Ohio State University), *Proper analytic subrings of the reals have Hausdorff dimension zero.*
- 4:15 – 4:40 **Patrick Speissegger** (University of Wisconsin), *A geometric proof of the definability of Hausdorff limits.*
- 4:45 – 5:10 **Kitty Holland** (Northern Illinois University), *To be announced.*

MONDAY, JUNE 2, Chicago Circle Center

Morning, Cardinal Room

- 8:00 – 8:30 Coffee
- 8:30 – 9:30 Invited Lecture: **Sergei Starchenko** (Notre Dame University), *To be announced.*
- 9:40 – 10:30 Tutorial: **Jack Lutz** (Iowa State University), *Kolmogorov Complexity, II.*
- 10:40 – 11:40 Invited Lecture: **Leo Harrington** (University of California, Berkeley), *Anaximander's saying.*
- 11:50 – 12:35 Contributed Talks, Sessions 5, 6, 7, 8: *See page 5.*

Afternoon, Cardinal Room

- 2:00 – 3:00 Invited Lecture: **Ulrich Kohlenbach** (BRICS, University of Aarhus), *Proof theoretic applications to functional analysis.*
- 3:15 – 4:05 Award of Karp Prize and Lecture on the work of the winner(s).

Special Session on Algebraic Logic and Universal Algebra (B)
White Oak Room

- 4:20 – 4:45 **Constantine Tsinakis** (Vanderbilt University), *Semi-direct products of residuated lattices.*
- 4:50 – 5:15 **Nikolaos Galatos** (Vanderbilt University), *Varieties of residuated lattices generated by positive universal classes.*
- 5:20 – 5:45 **George Voutsadakis** (Lake Superior State University), *A result and some open questions in CAAL.*
- 5:50 – 6:15 **Roger Maddux** (Iowa State University), *To be announced.*

Special Session on Computability Theory and Effective Mathematics (B)
Illinois Room C

- 4:20 – 4:45 **Richard A. Shore** (Cornell University), *Some combinatorial principles about linear orderings weaker than Ramsey's Theorem.*
4:50 – 5:15 **Geoff LaForte** (University of West Florida), *Notions of randomness for reals.*
5:20 – 5:45 **Antonio Montalban** (Cornell University), *Embedding jump upper semilattices in the Turing degrees.*
5:50 – 6:15 **Bjorn Kjos-Hanssen** (University of Heidelberg), *To be announced.*

Special Session on Model Theory (B)
Cardinal Room

- 4:20 – 4:45 **David Lippel** (McMaster University), *Finitely axiomatizable omega-categorical theories.*
4:50 – 5:15 **Alfred Dolich** (University of Wisconsin), *On properties guaranteeing the existence of universal models in an elementary class.*
5:20 – 5:45 **Itay Ben Yaacov** (University of Paris VII and University of Illinois, Urbana-Champaign), *Model theory of probability spaces.*
5:50 – 6:15 **Ziv Shami** (University of Illinois, Urbana-Champaign), *On Kueker simple theories and small unidimensional simple theories.*

8:30 – 11:00 ASL Council Meeting. White Oak Room.

TUESDAY, JUNE 3, Chicago Circle Center
Morning, Cardinal Room

- 8:00 – 8:30 Coffee
8:30 – 9:30 Invited Lecture: **Gregory Cherlin** (Rutgers University), *Simple groups of finite Morley rank: The Borovik program.*
9:40 – 10:30 Tutorial: **Jack Lutz** (Iowa State University), *Kolmogorov Complexity, III.*
10:40 – 11:40 Invited Lecture: **Ralph McKenzie** (Vanderbilt University), *The interplay between structural insight and algorithmic problems in general algebra.*
11:50 – 12:35 Contributed Talks, Sessions 9, 10, 11, 12: *See page 6.*

Afternoon, Cardinal Room

- 2:00 – 3:00 Invited Lecture: **Leonid Levin** (Boston University), *Forbidden information.*
3:15 – 4:15 Invited Lecture: **Yuri Gurevich** (Microsoft Research), *Kolmogorov machines and related issues.*

Special Session on Algebraic Logic and Universal Algebra (C)
White Oak Room

- 4:30 – 4:55 **K. V. Adaricheva** (Institute of Mathematics of SB RAS), *Largest extension of a finite convex geometry.*
5:00 – 5:25 **Clifford Bergman** (Iowa State University), *Boolean Semilattices.*
5:30 – 5:55 **Peter Jipsen** (Chapman University), *An online database of classes of algebraic structures.*
6:00 – 6:25 **Steve Seif** (University of Louisville), *To be announced.*

Special Session on Computability Theory and Effective Mathematics (C)
Illinois Room C

- 4:30 – 4:55 **Noam Greenberg** (Cornell University), *Generalized high degrees have the complementation property.*
5:00 – 5:25 **André Nies** (University of Auckland), *Randomness and lowness.*
5:30 – 5:55 **Russell Miller** (Cornell University), *Spectra of structures and relations.*
6:00 – 6:25 **Valentina S. Harizanov** (George Washington University), *Degrees of the isomorphism types of countable structures.*

Special Session on Model Theory (C)
Cardinal Room

- 4:30 – 4:55 **Evgueni Vassiliev** (University of Illinois, Urbana-Champaign), *Lovely pairs of simple structures.*
5:00 – 5:25 **Alexander J. Berenstein** (University of Illinois, Urbana-Champaign), *Non-dividing in the Banach lattices $L^p(X, U, \mu)$.*
5:30 – 5:55 **Monica VanDieren** (Stanford University), *Stability in tame AECs.*
8:30 – 11:00 ASL Council Meeting. White Oak Room.

WEDNESDAY, JUNE 4, Chicago Circle Center
Morning, Cardinal Room

- 8:00 – 8:30 Coffee
8:30 – 9:30 Invited Lecture: **Alan Dow** (University of North Carolina, Charlotte), *MAD families and topological spaces.*
9:40 – 10:40 Invited Lecture: **Michael Makkai** (McGill University), *A new set theory.*
10:55 – 11:55 Invited Lecture: **Andrzej Rosłanowski** (University of Nebraska, Omaha), *How much sweetness is there in the universe?*

Special Session on Algebraic Logic and Universal Algebra (D)
White Oak Room

- 12:05 – 12:30 **Stanley N. Burris** (University of Waterloo), *Foundations for Boole's algebra of logic.*

CONTRIBUTED TALKS
(For joint papers, * indicates the speaker.)

SUNDAY, JUNE 1

Session 1, Sunday, June 1, in White Oak Room

- 11:50 – 12:10 **Jeffrey L. Hirst**, *Milliken's Theorem, ultrafilters, and reverse mathematics.*
12:15 – 12:35 **Ksenija Simic**, *Reverse mathematics of Hilbert spaces.*

Session 2, Sunday, June 1, in Fort Dearborn Room

- 11:50 – 12:10 **Lev Yu. Glebsky*** and **Yevgeniy Gordon**, *On a class of word sets and extension of monadic second order language.*
12:15 – 12:35 **Paulo Oliva**, *On the extraction of polynomial-time algorithms from ineffective proofs in feasible analysis.*

Session 3, Sunday, June 1, in Illinois Room C

- 11:50 – 12:10 **Mauricio Osorio*** and **Juan Antonio Navarro**, *Modal logic $S5_2$ and FOUR.*
12:15 – 12:35 **Jeffrey Burdges**, *A signalizer functor theorem for groups of finite Morley rank.*

Session 4, Sunday, June 1, in Cardinal Room

- 11:50 – 12:10 **Jui-Lin Lee**, *On Gödel's Completeness Theorem.*

MONDAY, JUNE 2

Session 5, Monday, June 2, in White Oak Room

- 11:50 – 12:10 **Kerry Ojakian**, *Ramsey lower bounds in bounded arithmetic.*
12:15 – 12:35 **Alfio Giarlotta**, *The representability number of a chain.*

Session 6, Monday, June 2, in Fort Dearborn Room

- 11:50 – 12:10 **Wim Ruitenburg**, *Intuitionistic theories whose Kripke models are all T-normal ones.*
12:15 – 12:35 **Daniel Leivant**, *The constructive arithmetical hierarchy.*

Session 7, Monday, June 2, in Illinois Room C

- 11:50 – 12:10 **Katalin Bimbó**, *A set theoretical semantics for full propositional linear logic.*

Session 8, Monday, June 2, in Cardinal Room

- 12:15 – 12:35 **Dennis F. Cudia**, *General inductive logic.*

TUESDAY, JUNE 3

Session 9, Tuesday, June 3, in White Oak Room

- 11:50 – 12:10 **Natasha Dobrinen**, *A very weak distributive law and a related game in Boolean algebras.*
12:15 – 12:35 **Tetsuya Ishiu**, *Club guessing sequences and their applications.*

Session 10, Tuesday, June 3, in Fort Dearborn Room

- 11:50 – 12:10 **Stephen M. Walk**, *Blanketing functions and a conjecture about array computable degrees.*
12:15 – 12:35 **Guohua Wu**, *Complementing the cappable degrees in the difference hierarchy.*

Session 11, Tuesday, June 3, in Illinois Room C

- 11:50 – 12:10 **Yevgeniy Makarov**, *Another characterization of provably recursive functions.*

Session 12, Tuesday, June 3, in Cardinal Room

- 11:50 – 12:10 **Richard B. Angell*** and **Fred Michael**, *Reconciliation of intuitionist and classical logic by T-operator.*
12:15 – 12:35 **Frank Wroblewski**, *The completion of classical propositional-quantificational logic accommodates indeterminacy.*