

ASSOCIATION FOR SYMBOLIC LOGIC
2005 ANNUAL MEETING

Stanford University
Stanford, CA

March 19–22, 2005

REVISED PROGRAM

Program Committee: J. Mitchell, M. Rathjen, S. Shapiro, R. Solomon, P. Speissegger, J. Steel (Chair).

Local Organizing Committee: A. Arana, S. Feferman, G. Mints, J. Mitchell, R. Sommer (Chair).

All lectures will be held in the basement level of Building 380 (Math Corner) and Building 420 (Jordan Hall). The registration desk will be in the basement-level lobby area of Building 380. Book exhibits will be in Building 420, room 048. Coffee breaks will be in the basement courtyard behind Building 380, weather permitting, and in the basement-level lobby area of Building 380, otherwise.

SATURDAY, MARCH 19

Morning, Building 420, Room 040

- 8:15 – 8:45 Coffee and Snacks
- 8:45 – 9:00 Opening Remarks
- 9:00 – 10:00 Invited Lecture: **Ilijas Farah** (York University), *Absoluteness and the uncountable*.
- 10:00 – 11:00 Invited Lecture: **Andre Scedrov** (University of Pennsylvania), *Logic in computer security*.
- 11:00 – 11:20 Break
- 11:20 – 12:20 Tutorial: **Moshe Vardi** (Rice University), *Automated verification = graphs, automata, and logic*.

Afternoon, Building 420, Room 040

- 2:00 – 3:00 Invited Lecture: **Solomon Feferman** (Stanford University), *Open-ended schematic axiom systems*.
- 3:00 – 3:10 Break

Special Session on Set Theory and Borel Structure, Session A
Room 380-380C

- 3:10 – 3:35 **Alexander S. Kechris** (Caltech), *De Groot's problem*.
3:40 – 4:05 **Cristian Rosendal** (Caltech), *Polish groups; automatic continuity and bounded orbits*.
4:10 – 4:35 **Simon Thomas** (Rutgers University), *Property (τ) and E_0 -ergodicity*.

Special Session on Proof Theory and Constructivity, Session A
Room 380-380Y

- 3:10 – 3:35 **Rosalie Iemhoff** (Technical University, Vienna), *Basic intuitionistic logic of proofs*.
3:40 – 4:05 **Henry Towsner and Grigori Mints** (Carnegie Mellon University and Stanford University), *A simple substitution method for ID1*.
4:10 – 4:35 **Sergei Tupailo** (Ohio State University), *On the consistency of New Foundations*.
4:40 – 4:55 Break

Special Session on Model Theory, Session A
Room 380-380C

- 4:55 – 5:20 **Yoave Yaffe** (McMaster University), *Model companions and finite presentations in Lie differential fields*.
5:25 – 5:50 **Daniel J. Miller** (University of Toronto), *Polynomially bounded ω -minimal structures with C_∞ uniformization*.
5:55 – 6:20 **Dale Radin** (McMaster University), *Morley degree in unidimensional compact complex spaces*.

Special Session on Computability and Randomness, Session A
Room 380-380Y

- 4:55 – 5:20 **Theodore Slaman** (UC Berkeley), *Nonuniform measures and random reals*.
5:25 – 5:50 **Sebastiaan A. Terwijn** (Technical University of Vienna), *Randomness, diagonalization, and domination properties*.
5:55 – 6:20 **Jan Reimann** (Universität Heidelberg), *Kolmogorov-Loveland randomness and stochasticity*.
6:30 – 8:00 Reception. Faculty Club, Gold Room.

SUNDAY, MARCH 20

Morning, Building 420, Room 040

- 8:30 – 9:00 Coffee and Snacks
9:00 – 10:00 Invited Lecture: **Deirdre Haskell** (McMaster University), *Valued fields and elimination of imaginaries*.
10:00 – 11:00 Sixteenth Annual Gödel Lecture: **Menachem Magidor** (Hebrew University of Jerusalem), *To be announced*.
11:00 – 11:20 Break
11:20 – 12:20 Tutorial: **Moshe Vardi** (Rice University), *Automated verification = graphs, automata, and logic*.

Afternoon, Room 420-040

- 2:00 – 3:00 Invited Lecture: **Vladimir Pestov** (University of Ottawa), *On the groups of automorphisms of various structures; their geometry, dynamics, and combinatorics*.
3:00 – 3:10 Break

Special Session on Model Theory, Session B
Room 380-380Y

- 3:10 – 3:35 **Monica VanDieren** (University of Michigan), *Independence, limit models and superstability in abstract elementary classes*.
3:40 – 4:05 **Alexei Kolesnikov** (University of Michigan), *Generalized amalgamation properties in simple theories*.
4:10 – 4:35 **Dominika Polkowska** (University of Illinois), *From pseudofinite fields to PAC substructures of stable structures*.

Special Session on Computability and Randomness, Session B
Room 380-380C

- 3:10 – 3:35 **Denis Hirschfeldt** (University of Chicago), *K-triviality and bases for 1-randomness*.
3:40 – 4:05 **Barbara Csima and Antonio Montalban*** (Cornell University), *A minimal pair of K-degrees*.
4:10 – 4:35 **Joseph Miller** (Indiana University), *Contrasting plain and prefix-free complexity*.
4:40 – 4:55 Break

Special Session on Set Theory and Borel Structure, Session B
Room 380-380Y

- 4:55 – 5:20 **Matthew Foreman** (UC Irvine), *The forbidden interval*.
5:25 – 5:50 **Benjamin D. Miller** (UCLA), *Weakly wandering sequences*.
5:55 – 6:20 **Asger Dag Törnquist** (UCLA), *The Borel complexity of orbit equivalence*.
6:25 – 6:50 **Udayan B. Darji** (University of Louisville), *Small sets in groups*.

Special Session on Proof Theory and Constructivity, Session B
Room 380-380C

- 4:55 – 5:20 **Toshiyau Arai** (Kobe University), *Epsilon substitution method for inductive definitions.*
5:25 – 5:50 **Henry Towsner** (Carnegie Mellon University), *Termination of the substitution method for ID1.*
5:55 – 6:20 **Tim Carlson** (Ohio State University), *Ranked β -calculi.*

MONDAY, MARCH 21

Morning, Building 420, Room 040

- 8:30 – 9:00 Coffee and Snacks
9:00 – 10:00 Invited Lecture: **Jindrich Zapletal** (University of Florida), *Potential theory and forcing.*
10:00 – 11:00 Invited Lecture: **Raf Cluckers** (Katholieke Universiteit Leuven), *New directions for real integration and the Fourier transforms of subanalytic integrable functions.*
11:00 – 11:20 Break
11:20 – 12:20 Tutorial: **Moshe Vardi** (Rice University), *Automated verification = graphs, automata, and logic.*

Afternoon, Building 420, Room 040

- 2:00 – 3:00 Retiring Presidential Address: **Richard Shore** (Cornell University), *Degree structures: local and global investigations.*
3:00 – 3:10 Break

Special Session on Model Theory, Session C
Room 380-380C

- 3:10 – 3:35 **James Tyne** (Ohio State University), *An alternate approach to the valuation property.*
3:40 – 4:05 **Alfred Dolich** (McMaster University), *On structures associated to definable one forms.*
4:10 – 4:35 **Charles Steinhorn** (Vassar College), *On model theory for classes of finite structures.*

Special Session on Computability and Randomness, Session C
Room 380-380Y

- 3:10 – 3:35 **Frank Stephan** (National University of Singapore), *Computing strings of maximal complexity.*
3:40 – 4:05 **Bjorn Kjos-Hanssen** (University of Connecticut), *Downward closed classes of Turing degrees and randomness.*
4:10 – 4:35 **Joseph Miller and Andre Nies** (Indiana University, University of Auckland), *Open questions in randomness and computability .*
4:40 – 4:55 Break

Special Session on Set Theory and Borel Structure, Session C
Room 380-380C

- 4:55 – 5:20 **Steve Jackson** (University of North Texas), *Hyperfiniteness and the union problem.*
5:25 – 5:50 **Mike Oliver** (University of North Texas), *Definable cardinality of the collection of quotient of Boolean algebras.*
5:55 – 6:20 **John Clemens** (Pennsylvania State University), *Generating equivalence relations by homeomorphisms.*
6:25 – 6:50 **Su Gao** (University of North Texas), *The optimality of a theorem of Becker and Kechris.*

Special Session on Proof Theory and Constructivity, Session C
Room 380-380Y

- 4:55 – 5:20 **Michael Beeson** (San Jose State University), *Constructivity, computability, and the continuum.*
5:25 – 5:50 **Douglas Bridges** (University of Canterbury), *Journey into apartness space.*
5:55 – 6:20 **John R. Harrison** (Intel), *Challenges for the formal approach to proof.*

TUESDAY, MARCH 22

Morning, Building 420, Room 040

- 8:30 – 9:00 Coffee and Snacks
9:00 – 10:00 Invited Lecture: **Steve Awodey** (Carnegie Mellon University), *Algebraic set theory.*
10:00 – 11:00 Invited Lecture: **Andrey Morozov** (Sobolev Institute of Mathematics and Novosibirsk University), *On elementary submodels of F -parameterizable models.*
11:00 – 11:20 Break
11:20 – 12:20 Invited Lecture: **Andreas Weiermann** (Utrecht University), *Phase transition and universality for independence results.*

Afternoon, Building 380

- 2:00 – 4:40 Contributed Talks, Sessions A, B, C: *See page 6.*

Afternoon, Building 380

CONTRIBUTED TALKS

Session A: Tuesday, March 22
Room 380-380C

- 2:00 – 2:20 **William C. Calhoun**, *Monotonicity of complexity measures.*
2:25 – 2:45 **Wim Ruitenberg**, *Very intuitionistic theories that admit quantifier elimination.*
2:50 – 3:10 **Dan E. Willard**, *A version of the Second Incompleteness Theorem for axiom systems that recognize addition, but not multiplication, as a total function.*
3:15 – 3:25 Break
3:25 – 3:45 **Guohua Wu**, *Isolation and nonboundings.*
3:50 – 4:10 **Rumen D. Dimitrov**, *Characterization of the principal filters of quasimaximal spaces in $\mathcal{L}^*(V_\infty)$.*
4:15 – 4:35 **Katalin Bimbo**, *Admissibility of cut in the structurally free logic $LC_+^{Y,y}$.*

Session B: Tuesday, March 22
Room 380-380X

- 2:00 – 2:20 **Paul Bankston**, *In search of categoricity in topology.*
2:25 – 2:45 **Robert Mignone**, *Almost disjoint families and bounding numbers.*
2:50 – 3:10 **Y. Firat Celikler**, *Dimension theory of Denef-Pas analytic sets.*
3:15 – 3:25 Break
3:25 – 3:45 **Leo Marcus**, *Logical foundations of an adaptive security infrastructure.*
3:50 – 4:10 **Jack D. Stecher**, *An application of intuitionistic topology to economics and accounting.*
4:15 – 4:35 **Leona F. Fass**, *Agents on the web: some behavioral theory and applications.*

Session C: Tuesday, March 22
Room 380-380Y

- 2:00 – 2:20 **Byeong-Uk Yi**, *Is logic axiomatizable?*
2:25 – 2:45 **Otavio Bueno**, *Nominalistic metalogic.*
2:50 – 3:10 **Hannes Leitgeb**, *Semantic dependence for type-free truth, modality, and membership.*
3:15 – 3:25 Break
3:25 – 3:45 **Michael Mendler and Valerie de Paiva**, *Constructive CK for contexts.*
3:50 – 4:10 **Victor Pambuccian**, *How simple is hyperbolic geometry?*