ASSOCIATION FOR SYMBOLIC LOGIC
2014 NORTH AMERICAN ANNUAL MEETING

University of Colorado
Boulder, CO

May 19 – May 22, 2014

Program Committee: M. Groszek (Chair), A. Kanamori, K. Kearnes, J. Marikova, S. Thomas, H. Towsner.
Local Organizing Committee: N. Dobrinen, G. Forbes, N. Galatos, K. Kearnes (Chair), D. Monk, A. Szendrei.
Please see `http://math.colorado.edu/asl2014/` for additional information.

All activities for the meeting will take place on the campus of the University of Colorado. Talks will take place in Fleming Hall; the plenary lectures will be in room 155. A welcome reception will be held on Monday, May 19 at 6:00 pm in the Koenig Alumni Center. All other activities for the meeting will take place in Kittredge Central Hall. Registration will be in the lobby and the book exhibits will be in multipurpose room B. Coffee and refreshments will be in multipurpose room C.

Special session introductions (2:00 Monday and 11:20 Tuesday) should be accessible to a general audience, and in particular to graduate students. For non-specialists, they may serve as a prerequisite for other talks in the special session.

MONDAY, MAY 19

Morning, Fleming Hall room 155

9:00 – 10:00	Registration (Kittredge Central Hall lobby), Coffee and Snacks (Kittredge Central Hall multipurpose room C).
10:10 – 10:20	Opening Remarks.
10:20 – 11:10	Invited Lecture: **Sean Walsh** (UC Irvine), *The constructible universe, the naive conception, and intensional logic.*
11:20 – 12:10	Invited Lecture: **M. Chris Laskowski** (Maryland), *When is* $\aleph_1$ *categorially absolute?*

Afternoon, Fleming Hall

2:00 – 2:50 Special Session Introductions: Philosophical Aspects of Games and Social Algorithms (page 5); Recursion Theory (page 6); and Universal Algebra and Constraint Satisfaction (page 8).

3:00 – 3:45 Special Sessions: Philosophical Aspects of Games and Social Algorithms, Session A (page 5); Recursion Theory, Session A (page 6); Universal Algebra and Constraint Satisfaction, Session A (page 8); and Contributed Talks, Session A (page 9).

3:45 – 4:15 Coffee, Kittredge Central Hall multipurpose room C.

4:15 – 5:00 Special Sessions: Philosophical Aspects of Games and Social Algorithms, Session A (page 6); Recursion Theory, Session A (page 6); Universal Algebra and Constraint Satisfaction, Session A (page 8); and Contributed Talks, Session A (page 9).

5:10 – 5:30 Contributed Talks, sessions B1-4 (page 9).

6:00 – 8:00 Welcome Reception, Koenig Alumni Center .

TUESDAY, MAY 20

Morning, Fleming Hall room 155

8:30 – 9:00 Coffee and Snacks, Kittredge Central Hall multipurpose room C.

9:00 – 9:50 Invited Lecture: **Libor Barto** (Charles University), *Universal algebra and the constraint satisfaction problem.*

9:50 – 10:20 Coffee, Kittredge Central Hall multipurpose room C.

10:20 – 11:10 Invited Lecture: **Andrew Marks** (Caltech), *Descriptive graph combinatorics of locally finite graphs.*

11:20 – 12:10 Special Session Introductions: Logic and Algorithms for Higher-Order Computations (page 4); Set Theory in Honor of Rich Laver (page 7); and Model Theory (page 4).

Afternoon, Fleming Hall

2:00 – 3:25 Special Sessions: Logic and Algorithms for Higher-Order Computations, Session A (page 4); Set Theory in Honor of Rich Laver, Session A (page 7); Model Theory, Session A (page 5); and Philosophical Aspects of Games and Social Algorithms, Session B (page 6).

3:25 – 3:55 Coffee, Kittredge Central Hall multipurpose room C.

3:55 – 5:20 Special Sessions: Recursion Theory, Session B (page 6); Universal Algebra and Constraint Satisfaction, Session B (page 8); Model Theory, Session B (page 5); and Philosophical Aspects of Games and Social Algorithms, Session C (page 6).

5:30 – 6:15 Contributed Talks, session C (pages 9-10).

WEDNESDAY, MAY 21

Morning, Fleming Hall room 155

8:30 – 9:00 Coffee and Snacks, Kittredge Central Hall multipurpose room C.

9:00 – 9:50 Invited Lecture: **Valeria de Paiva** (Nuance Communications), *Edwardian proofs for futuristic programs and personal assistants...*

9:50 – 10:20 Coffee, Kittredge Central Hall multipurpose room C.

10:20 – 11:10 Invited Lecture: **Jeffry L. Hirst** (Appalachian State), *Graphs, computability, and reverse mathematics.*

11:20 – 12:20 Retiring Presidential Address: **Alex Wilkie** (Manchester).

Afternoon, Fleming Hall

2:00 – 3:25 Special Sessions: Universal Algebra and Constraint Satisfaction, session C (page 8); Logic and Algorithms for Higher-Order Computations, session B (page 4); Set Theory in Honor of Rich Laver, session B (page 7); and Recursion Theory, session C (page 7).

3:25 – 3:55 Coffee, Kittredge Central Hall multipurpose room C.

3:55 – 5:30 Special Sessions: Model Theory, session C (page 5); Logic and Algorithms for Higher-Order Computations, session C (page 4); Set Theory in Honor of Rich Laver, session C (page 7); and Contributed Talks, session D (page 10).

5:40 – 6:25 Contributed Talks: session E (page 10).

THURSDAY, MAY 22

Morning, Fleming Hall room 155

8:30 – 9:00 Coffee and Snacks, Kittredge Central Hall multipurpose room C.

9:00 – 9:50 Invited Lecture: **Alexei S. Kolesnikov** (Towson), *Amalgamation properties.*

9:50 – 10:20 Coffee, Kittredge Central Hall multipurpose room C.

10:20 – 11:10 Invited Lecture: **Barbara F. Csima** (Waterloo), *Isomorphisms of computable structures.*

11:20 – 12:10 Invited Lecture: **Michael Hrusak** (UNAM Mexico), *Forcing, filters, and ideals.*

Special Session: Logic and Algorithms for Higher-Order Computations

(Organized by Naoki Kobayashi and Luke Ong)

Introduction, TUESDAY, MAY 20, Room 154

11:20 – 12:10 **Luke Ong** (Oxford), *Higher-order model checking.*

Session A, TUESDAY, MAY 20, Room 154

2:00 – 2:40 **Damian Niwiński** (Warsaw), *Trees with decidable theories.*

2:45 – 3:25 **Naoki Kobayashi** (Tokyo), *Intersection types for higher-order model checking.*

Session B, WEDNESDAY, MAY 21, Room 156

2:00 – 2:40 **Paweł Parys** (Warsaw), *Expressive power of collapsible pushdown automata.*

2:45 – 3:25 **Sylvain Salvati** (Inria), *Models for model checking higher-order programs.*

Session C, WEDNESDAY, MAY 21, Room 156

3:55 – 4:35 **Rick Statman** (Carnegie Mellon), *Near rings, the Freyl hierarchy, simple types, Church's theorem, and the game of Alonzo.*

4:45 – 5:25 **Andrzej S. Murawski** (Warwick), *Algorithmic nominal game semantics.*

Special Session: Model Theory

(Organized by Philipp Hieronymi and Jana Marikova)

Introduction, TUESDAY, MAY 20
Room 157

11:20 – 12:10 **Sergei Starchenko** (Notre Dame), *On applications of o-minimality to number theory.*

Session A, TUESDAY, MAY 20, Room 157

2:00 – 2:40 **Alfred Dolich** (Kingsborough Community College CUNY), *Ordered structures where every infinite definable set has nonempty interior.*

2:45 – 3:25 **Joseph Flenner** (University of St. Francis), *VC-minimal theories and valued fields.*

Session B, TUESDAY, MAY 20, Room 157

3:55 – 4:35 **Krzysztof Krupiński** (Wroclaw), *Generalized Bohr compactification and model-theoretic connected components.*

4:40 – 5:20 **Eva Leenknegt** (Purdue), *Differentiation in p-minimal structures and p-adic local monotonicity.*

Session C, WEDNESDAY, MAY 21, Room 154

3:55 – 4:35 **Clifton Ealy** (Western Illinois), *TBA.*
4:45 – 5:25 **Erik Walsberg** (UCLA), *Metric geometry in the 0-minimal setting.*

Special Session: Philosophical Aspects of Games and Social Algorithms

(Organized by Eric Pacuit and Rohit Parikh)

Introduction, MONDAY, MAY 19, Room 154

2:00 – 2:50 **Eric Pacuit and Rohit Parikh** (Maryland)(CUNY), *Philosophical aspects of games and social algorithms.*

Session A, MONDAY, MAY 19, Room 154

3:00 – 3:40 **Johan van Benthem** (Amsterdam and Stanford), *Logic and games: toward a theory of play.*
4:15 – 4:55 **Akeel Bilgrami** (Columbia), *Reframeworking the mentality of politics.*

Session B, TUESDAY, MAY 20, Room 104

2:00 – 2:40 **Brian Skyrms** (UC Irvine), *Dynamics of signaling games.*
2:45 – 3:25 **Rineke Verbrugge** (Groningen), *Thinking about thinking about thinking: from food caching to games.*

Session C, TUESDAY, MAY 20, Room 104

3:55 – 4:35 **Steven J. Brams** (NYU), *Fair division of divisible and indivisible items: possibilities and impossibilities.*
4:40 – 5:20 **R. Ramanujam** (Chennai), *Logical dynamics of rational choice in large games.*

Special Session: Recursion Theory

(Organized by Oscar Levin and Reed Solomon)

Introduction, MONDAY, MAY 19, Room 156

2:00 – 2:50 **Julia F. Knight** (Notre Dame), *Using computability to measure complexity of structures and classes of structures.*

Session A, MONDAY, MAY 19, Room 156

3:00 – 3:40 **Uri Andrews, Mingzhong Cai*, and David Diamondstone** (Wisconsin), *Limit computability and ultrafilters on ω.*
4:15 – 5:25 **Damir D. Zhafarov and Greg Igusa** (Notre Dame), *Using flawed oracles to produce flawed computations.*

Session B, TUESDAY, MAY 20, Room 154

3:55 – 4:35 **Alexander Melnikov** (UC Berkeley), *Iterated embeddings of computable p-groups*

4:40 – 5:20 **Sara Quinn* and Christina Safranski** (Dominican University), *The complexity of integer matrix groups.*

Session C, WEDNESDAY, MAY 21, Room 104

2:00 – 2:40 **Laurent Bienvenu, Ludovic Patey, and Paul Shafer*** (Ghent University), *Exploring randomness, diagonally non-recursiveness, and Ramsey-type combinatorial principles in reverse mathematics.*

2:45 – 3:25 **Mariya I. Soskova** (Sofia University), *The definability of the total enumeration degrees and its consequences.*

Special Session Set Theory in Honor of Rich Laver
(Organized by Jean A. Larson and William Mitchell)

Introduction, TUESDAY, MAY 20, Room 156

11:20 – 12:10 **Jean A. Larson** (Florida), *Honoring Rich Laver and his mathematics.*

Session A, TUESDAY, MAY 20, Room 156

2:00 – 2:40 **Joel David Hamkins** (CUNY Staten Island), *Superstrong and other large cardinals are never Laver indestructible.*

2:45 – 3:25 **Natasha Dobrinen** (University of Denver), *Some recent progress in Ramsey theory.*

Session B, WEDNESDAY, MAY 21, Room 157

2:00 – 2:40 **Jose Mijares** (University of Denver), *Local Ellentuck theory and topological Ramsey spaces.*

2:45 – 3:25 **Sheila K. Miller** (CUNY City Technology), *Critical sequences of rank-to-rank embeddings and a tower of finite left distributive algebras.*

Session C, WEDNESDAY, MAY 21, Room 157

3:55 – 4:35 **Dima Sinapova** (UIC), *Square properties at successors of singular cardinals.*

4:45 – 5:25 **Stevo Todorčević** (Toronto and CNRS Paris), *Recent advances in the Ramsey theory of trees.*

Special Session: Universal Algebra and Constraint Satisfaction
(Organized by Agnes Szendrei and Ross Willard)

Introduction, MONDAY, MAY 19, Room 157

2:00 – 2:50 **Matt Valeriote** (McMaster), *An algebraic approach to constraint satisfaction: an introduction.*

Session A, MONDAY, MAY 19, Room 157

3:00 – 3:40 **Benoit Larose** (Concordia), *Space complexity of binary conservative CSPs: a dichotomy.*

4:15 – 5:25 **Michael Pinsker** (Université Diderot Paris 7), *Reconstructing structures from their abstract clones.*

Session B, TUESDAY, MAY 20, Room 156

3:55 – 4:35 **Andrei A. Bulatov** (Simon Fraser), *Logic and counting constraint satisfaction problem.*

4:40 – 5:20 **Stanislav Živný** (Oxford), *Weighted clones and valued CSPs.*

Session C, WEDNESDAY, MAY 21, Room 154

2:00 – 2:40 **Gergö Gyenizse, Miklós Maróti*, and László Zádore** (Szeged), *The structure of polynomial operatives associated with smooth digraphs.*

2:45 – 3:25 **Alexandr Kazda** (Vanderbilt), *Algorithms that decide absorption.*

CONTRIBUTED TALKS

Session A, MONDAY, MAY 19,Room 104

3:00 – 3:20 **Brent Cody* and Sean Cox**, *Precipitous ideal extenders and forcing.*

3:25 – 3:45 **Monroe Eskew**, *Many dense ideals.*

4:15 – 4:35 **Jennifer Brown* and Natasha Dobrinen**, *The spectra of Tukey types of ultrafilters on several classes of Boolean algebras.*

4:40 – 5:00 **Ari Meir Brodsky**, *A theory of stationary trees and the balanced Baumgartner-Hajnal-Todorčević theorem for trees.*

Session B1, MONDAY, MAY 19, Room 154

5:10 – 5:30 **Rohit Parikh**, *Hoare logic and Gricean implicature.*

Session B2, MONDAY, MAY 19, Room 156

5:10 – 5:30 **Ellen Chih**, *Nonsplittings of speedable sets.*

Session B3, MONDAY, MAY 19, Room 157

5:10 – 5:30 **Julie Linman* and Michael Pinsker**, *Reducts of the random permutation.*

Session B4, MONDAY, MAY 19, Room 104

5:10 – 5:30 **Graham Leach-Krouse**, *Structural abstraction principles.*

Session C1, TUESDAY, MAY 20, Room 154

5:30 – 5:50 **Matthew Jura, Oscar Levin*, and Tyler Markkanen**, *Finding small domatic partitions in graphs with large domatic number.*

5:55 – 6:15 **Matthew Harrison-Trainor**, *Degree spectra of relations on a cone.*

Session C2, TUESDAY, MAY 20, Room 156

5:30 – 5:50 **Matthew Moore**, *Idempotent congruence modular algebras that admit a natural duality have cube terms.*

5:55 – 6:15 **Jonah Horowitz**, *Some hardness results for Mal'cev conditions.*

Session C3, TUESDAY, MAY 20,Room 157

5:30 – 5:50 **Richard Rast**, *On Borel-completeness for o-minimal theories.*

5:55 – 6:15 **Alex Kruckman**, *Sampling measures and limits of finite structures.*

Session C4, TUESDAY, MAY 20, Room 104

5:30 – 5:50 **Ted Shear* and Konstantin Genin**, *Contraction and the loss of true belief.*

5:55 – 6:15 **Evgeny Gordon**, *Nonstandard analysis as a tool for investigation of the relation between discrete and continuous mathematics.*

Session D, WEDNESDAY, MAY 21, Room 104

3:55 – 4:15 **Joe Mileti**, *Irreducibles and primes in computable rings.*

4:20 – 4:40 **Kyle Riggs**, *The computability of completely decomposable groups.*

4:45 – 5:05 **Cameron E. Freer**, *Computable invariant measures and algorithmically random structures.*

5:10 – 5:30 **Sankha S. Basu* and Stephen G. Simpson**, *Mass problems and intuitionistic higher-order logic.*

Session E1, WEDNESDAY, MAY 20, Room 154

5:40 – 6:00 **Cameron Donnay Hill**, *Model-theoretic approaches to Ramsey theory.*

6:05 – 6:25 **Caleb Ziegler**, *Polynomial-time equivalence relation reducibility.*

Session E2, WEDNESDAY, MAY 20, Room 156

5:40 – 6:00 **Jeroen Van der Meeren**, *Sequences with the gap-embeddability relation.*

6:05 – 6:25 **Noah Schweber**, *Determinacy and higher reverse mathematics.*

Session E3, WEDNESDAY, MAY 20, Room 157

5:40 – 6:00 **Everett Piper* and Sheila Miller**, *Large cardinals killed by small forcings.*

6:05 – 6:25 **Sherwood Hachtman**, *Calibrating Borel Determinacy.*

Session E4, WEDNESDAY, MAY 20, Room 104

5:40 – 6:00 **Sergei Artemov and Tudor Protopopescu***, *Intuitionistic epistemic logic.*

6:05 – 6:25 **David Ellerman**, *Partition logic and applications.*