# ASSOCIATION FOR SYMBOLIC LOGIC
# 2008-09 WINTER MEETING

Marriott Wardman Park
Washington, DC

January 7-8, 2009

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Program committee: Ali Enayat (Chair), Simon Thomas, and Rebecca Weber.

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All ASL meeting participants are urged to register. The URL for advanced registration for the JMM is http://www.ams.org/amsmtgs/2110_reg.html. The registration desk for JMM will be located in the lobby outside the Marriott Ballroom.

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The Joint Mathematics Meetings includes two AMS/ASL co-sponsored Special Sessions: **Logic and Dynamical Systems**, on Monday, January 5 and Tuesday, January 6; and **Model Theoretic Methods in Finite Combinatorics**, on Tuesday, January 6 and Wednesday, January 7. The schedule for these Special Sessions appears on pages 4–6 of this program. Both sessions will be held in Virginia Suite B, Lobby Level, Marriott Wardman Park Hotel.

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Also of interest is the AMS special session **Logic and Topology** on Wednesday, January 7 and Thursday, January 8 in Harding Room, Mezzanine Level, Marriott. See the JMM program for the schedules.

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All talks in the ASL meeting will be held in Maryland Suite A, Lobby Level, Marriott.

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The ASL Reception will take place on Wednesday, January 7, 2009, 5:00 - 7:00pm in Maryland Suite B, Lobby Level, Marriott.

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## WEDNESDAY, JANUARY 7

### Maryland Suite A, Lobby Level, Marriott

### Morning

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| 8:00 – 8:50 | Invited Lecture: **Rahim Moosa** (University of Waterloo), *Jet spaces and the Zilber dichotomy.* |
| 9:00 – 9:50 | Invited Lecture: **Christian Rosendal** (University of Illinois at Chicago), *Descriptive set theory and the classification of separable Banach spaces.* |
| 10:00 – 10:50 | Invited Lecture: **Inessa Epstein** (California Institute of Technology), *Orbit equivalence and ergodic actions of countable groups.* |

### Afternoon

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|---|---|
| 2:00 – 4:50 | Contributed Talks, Session I: *See page 3* |
| 5:00 – 7:00 | ASL Reception in Maryland Suite B, Lobby Level, Marriott. |

## THURSDAY, JANUARY 8

### Maryland Suite A, Lobby Level, Marriott

### Morning

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|---|---|
| 9:00 – 9:50 | Invited Lecture: **Barbara F. Csima** (University of Waterloo), *Computable structure theory.* |
| 10:00 – 10:50 | Invited Lecture: **Jouko Väänänen** (ILLC, Amsterdam, and University of Helsinki), *Set theoretic methods in model theory.* |

### Afternoon

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|---|---|
| 1:00 – 1:50 | Invited Lecture: **Albert Visser** (Utrecht University), *Can we make the Second Incompleteness Theorem coordinate free?* |
| 2:30 – 5:20 | Contributed Talks, Session II: *See page 3* |

## CONTRIBUTED TALKS - SESSION I

Wednesday, January 7
Maryland Suite A, Lobby Level, Marriott

2:00 – 2:20 **Sandro Skansi,** *The MP axiom of intensionality: connecting types and sets.*

2:30 – 2:50 **Billy Joe Lucas,** *Some theories concerning deontic implications of proof for belief.*

3:00 – 3:20 **Katalin Bimbó* and J. Michael Dunn,** *Canonicity in symmetric generalized Galois Logics.*

3:30 – 3:50 **Rumen Dimitrov,** *Automorphisms of certain filters of* $\mathcal{L}^*(V_\infty)$.

4:00 – 4:20 **Erez Shochat,** *Non-isomorphic automorphism groups of short recursively saturated models of PA.*

4:30 – 4:50 **Wesley Calvert*, Valentina Harizanov, and Alexandra Shlapentokh,** *Coding Turing degrees in geometric objects.*

## CONTRIBUTED TALKS - SESSION II

Thursday, January 8
Maryland Suite A, Lobby Level, Marriott

2:30 – 2:50 **Victoria Gitman,** *Ramsey-like cardinals.*

3:00 – 3:20 **Jonas Reitz,** *Set-theoretic geology.*

3:30 – 3:50 **Johanna N.Y. Franklin,** *van Lambalgen's Theorem and weaker randomness notions.*

4:00 – 4:20 **Logan Axon,** *Random closed sets and probability.*

4:30 – 4:50 **Yun Lu,** *Reducts of the generalized random bipartite graph.*

5:00 – 5:20 **Damir D. Dzhafarov, and Jeffrey L. Hirst*,** *The strength of the polarized Ramsey's Theorem.*

## AMS-ASL SPECIAL SESSION

$\boxed{\text{Logic and Dynamical Systems}}$

Organizer: Steve G. Simpson

Virginia Suite B, Lobby Level, Marriott

Monday, January 5

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|---|---|
| 2:15 – 2:30 | **Stephen G. Simpson,** *Symbolic dynamics and degrees of unsolvability.* |
| 2:35 – 2:50 | **C. T. Chong,** *Complex dynamics and Turing degrees.* |
| 2:55 – 3:10 | **Daniel J. Rudolph,** *Using orbit equivalence as a model for ergodic systems.* |
| 3:15 – 3:30 | **Douglas Cenzer* and S. Ali Dashti,** *Decidability of countable closed subshifts.* |
| 3:35 – 3:50 | **Christian Rosendal,** *Generic isometries and measure preserving homeomorphisms are conjugate to their powers.* |
| 3:55 – 4:10 | **Asger Tornquist,** *The classification problem for separable von Neumann factors.* |
| 4:15 – 4:30 | **S. Ali Dashti* and Douglas Cenzer,** *Computable dynamics of real functions.* |
| 4:35 – 4:50 | **Scott Schneider,** *Bernoulli actions of property ($\tau$) groups.* |
| 4:55 – 5:10 | **Vladimir G. Pestov,** *Matrix models for discrete and topological groups.* |
| 5:15 – 5:30 | **Jeremy Avigad,** *Computability in Ergodic theory.* |
| 5:35 – 5:50 | **Philipp Gerhardy,** *Proof mining in topological dynamics.* |
| 5:55 – 6:10 | **John D. Clemens,** *The isomorphism problem for subshifts.* |

Tuesday, January 6

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|---|---|
| 8:00 – 8:15 | **Matthew D. Foreman,** *Models for measure preserving transformations.* |
| 8:20 – 8:35 | **Su Gao*, Steve Jackson, and Brandon Seward,** *A coloring property for countable groups.* |
| 8:40 – 8:55 | **Bruno Durand, Andrei Romashchenko, and Alexander Shen*,** *Fixed-point aperiodic tilings.* |
| 9:00 – 9:15 | **Michael Hochman,** *$Z^d$-actions on the Cantor set: approximation, Rohlin properties and recursion theory.* |
| 9:20 – 9:35 | **Tom Meyerovitch,** *Recursive and algorithmic aspects of growth complexity for multidimensional SFTs.* |
| 9:40 – 9:55 | **R. Daniel Mauldin* and Alexander P. McLinden,** *Random closed sets viewed as random recursions.* |
| 10:00 – 10:15 | **Steve C. Jackson*, Su Gao, and Brandon Seward,** *A compactness theorem for markers and group colorings.* |
| 10:20 – 10:35 | **Joseph S. Miller,** *Two notes on subshifts.* |
| 10:40 – 10:55 | **Jarkko Kari,** *Mortality and periodicity of dynamical systems.* |
| 11:00 – 11:15 | **Mark Braverman,** *Computability and complexity of Julia sets.* |
| 11:20 – 11:35 | **Inessa Epstein* and Greg Hjorth,** *Equivalence relations with infinitely many ends and percolation.* |
| 11:40 – 11:55 | **Slawomir Solecki,** *A Ramsey theorem and dynamics.* |

## AMS-ASL SPECIAL SESSION

Model-theoretic Methods in Finite Combinatorics

Organizer: Martin Grohe and Johann M. Makowsky

Virginia Suite B, Lobby Level, Marriott

Tuesday, January 6

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|---|---|
| 1:00 – 1:20 | **Discussion** |
| 1:30 – 1:50 | **Menachem Kojman,** *Symmetrized Ramsey theorems for graphs and for countably categorical structures.* |
| 2:00 – 2:20 | **Gregory L. Cherlin,** *Universal graphs with forbidden subgraphs.* |
| 2:30 – 2:50 | **Andreas Blass,** *Partition theorems and permutation groups.* |
| 3:00 – 3:20 | **Robert Gilman, Yuri Gurevich, and Alexei Myasnikov*,** *A geometric zero-one law.* |
| 3:30 – 3:50 | **Jason P. Bell,** *Laplace transforms and zero-one laws.* |
| 4:00 – 4:20 | **Eldar Fischer* and Johann A. Makowsky,** *The Specker-Blatter Theorem revisited.* |

Wednesday, January 7

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|---|---|
| 1:00 – 1:20 | **Tomer Kotek*, Johann A. Makowsky, and Boris Zilber,** *Why is the chromatic polynomial a polynomial? A model theoretic interpretation.* |
| 1:30 – 1:50 | **Johann A. Makowsky,** *Towards a theory of graph polynomials.* |
| 2:00 – 2:20 | **Gabor Elek and Balasz Szegedy*,** *Non standard methods in hypergraph theory.* |
| 2:30 – 2:50 | **Jan Hubicka and Jaroslav Nesetril*,** *Homomorphism universal structures.* |
| 3:00 – 3:20 | **Achim Blumensath* and Bruno Courcelle,** *On the monadic second-order transduction hierarchy.* |
| 3:30 – 3:50 | **Albert Atserias,** *Ramsey theory and constraint propagation heuristics.* |
| 4:00 – 4:20 | **Stephan Kreutzer,** *Algorithmic meta-theorems.* |
| 4:30 – 4:50 | **Andrei A. Bulatov,** *Counting constraint satisfaction problems.* |
| 5:00 – 5:20 | **Benjamin Rossman,** *k-Clique requires k/4 variables.* |
| 5:30 – 5:50 | **Discussion** |