

ASSOCIATION FOR SYMBOLIC LOGIC
2012 NORTH AMERICAN ANNUAL MEETING

University of Wisconsin
Madison, WI

March 31 – April 3, 2012

Program Committee: J. Avigad, B. Hart (Chair), A. Miller, G. Nadathur, J. Reimann.
Local Organizing Committee: U. Andrews, M. Cai, S. Lempp (Chair), A. Miller, J. Miller.
Please see www.math.wisc.edu/~as12012 for additional information.

All activities for the meeting will take place in Van Vleck Hall on the campus of the University of Wisconsin. The plenary lectures will be in room B130. Registration will be in room 901 and the book exhibits will be in room 903. Coffee and refreshments will be in the 9th floor lounge, room 911. The welcome reception will be held on Saturday, March 31 at 6:30 pm in the lounge on the 9th floor of Van Vleck Hall.

SATURDAY, MARCH 31

Morning, B130

- 8:15 – 8:55 Registration (room 901), Coffee and Snacks (room 911).
8:55 – 9:00 Opening Remarks.
9:00 – 9:50 Invited Lecture: **Antonio Montalbán** (Chicago), *The computability of quasi-well-orderings*.
9:50 – 10:30 Coffee, room 911.
10:30 – 11:20 Invited Lecture: **Sergei Starchenko** (Notre Dame), *On Peterzil-Steinhorn groups definable in algebraically closed fields*.
11:30 – 12:20 Invited Lecture: **Warren Goldfarb** (Harvard), *Wittgenstein against logicism*.

Afternoon

- 2:00 – 3:30 Special Sessions: History of Logic (page 3); Computability, session A (until 4:00, page 3); and Set Theory, session A (page 4).
3:30 – 4:30 Coffee, room 911.
4:30 – 6:05 Contributed Talks: session A (page 6).

6:30 – 8:00 Welcome Reception in the 9th floor lounge of Van Vleck Hall.

SUNDAY, APRIL 1

Morning, B130

- 8:30 – 9:00 Coffee and Snacks, room 911.
9:00 – 9:50 Invited Lecture: **Joseph Miller** (Wisconsin), *Lebesgue density and cupping with K -trivial sets*.
9:50 – 10:30 Coffee, room 911.
10:30 – 11:20 Invited Lecture: **Toniann Pitassi** (Toronto), *Differential privacy and fairness in classification*.
11:30 – 12:30 Gödel Lecture: **John Steel** (UC Berkeley), *The hereditarily ordinal definable sets in models of determinacy*.

Afternoon

- 2:30 – 4:00 Special Sessions: Computability, session B (page 4); Set Theory, session B (page 4).
4:00 – 4:30 Coffee, room 911.
4:30 – 6:05 Contributed Talks: session B (page 6).

MONDAY, APRIL 2

Morning, B130

- 8:30 – 9:00 Coffee and Snacks, room 911.
9:00 – 9:50 Invited Lecture: **Alan Dow** (UNC Charlotte), *Compact spaces, converging sequences and set theory*.
9:50 – 10:30 Coffee, room 911.
10:30 – 11:20 Invited Lecture: **Isaac Goldbring** (UCLA), *Definability in metric structures*.
11:30 – 12:20 Invited Lecture: **Grigor Sargsyan** (Rutgers), *The Solovay hierarchy*.

Afternoon

- 2:00 – 3:30 Special Sessions: Model Theory, session A (page 5); Structural Proof Theory, session A (until 4:00, page 5); Set Theory, session C (page 4).
3:30 – 4:30 Coffee, room 911.
4:30 – 6:05 Contributed Talks: session C (page 6).

8:30 – 11:00 ASL Council Meeting, room 901.

TUESDAY, APRIL 3

Morning

- 8:30 – 9:00 Coffee and Snacks, room 911.
9:00 – 10:30 Sessions: Special sessions in Model Theory, session B (page 5); Structural Proof Theory, session B (page 5); Contributed talks, session D (until 11:00, page 6).
10:30 – 11:10 Coffee, room 911.
11:10 – 12:00 Invited Lecture (B130): **Moshe Vardi** (Rice), *From philosophical to industrial logics*.

Special Session on the history of logic on the centenary of the birth of Jean van Heijenoort

(Organized by Thomas Drucker)

SATURDAY, MARCH 31

Room B235

- 2:00 – 2:25 **Irving H. Anellis** (IUPUI), *Jean van Heijenoort as historian of modern logic*.
2:30 – 2:55 **Thomas Drucker** (Wisconsin - Whitewater), *Van Heijenoort on logic as language and calculus*.
3:00 – 3:25 **TBA**

Special Session on Computability

(Organized by Laurent Bienvenu and Jan Reimann)

Session A, SATURDAY, MARCH 31

Room B231

- 2:00 – 2:25 **Adam Day** (UC Berkeley), *A random Turing degree*.
2:30 – 2:55 **Paul Shafer** (Appalachian State), *Presenting the effectively closed Medvedev degrees requires $\mathbf{0}'''$* .
3:00 – 3:25 **Damir Dzhafarov** (Notre Dame), *Computable Mathias genericity*.
3:30 – 3:55 **Peter Gerdes** (Notre Dame/Boston), *Orbits of D -maximal sets in \mathcal{E}* .

Session B, SUNDAY, APRIL 1

Room B231

- 2:30 – 2:55 **Andrew Marks** (UC Berkeley), *Global problems in recursion theory and weakly universal countable Borel equivalence relations.*
3:00 – 3:25 **Chris Conidis** (Waterloo), *Proving that Artinian implies Noetherian without proving that Artinian implies finite length.*
3:30 – 3:55 **Rachel Epstein** (Harvard), *Prompt sets and automorphisms of \mathcal{E} .*

Special Session on Set Theory

(Organized by Dilip Raghavan and Juris Steprāns)

Session A, SATURDAY, MARCH 31

Room B223

- 2:00 – 2:25 **Carlos Martinez-Ranero** (Toronto), *Well quasi-ordering Aronszajn lines.*
2:30 – 2:55 **Hiroshi Sakai** (Kobe), *Fragments of Martin's Maximum and weak square.*
3:00 – 3:25 **Assaf Rinot** (Fields), *The extent of the failure of Ramsey's theorem at successor cardinals.*

Session B, SUNDAY, APRIL 1

Room B223

- 2:30 – 2:55 **Dima Sinapova** (Irvine), *Diagonal extender based Prikry forcing.*
3:00 – 3:25 **Miodrag Sokić** (Caltech), *Diagonal property (cross-construction) and Ramsey classes.*
3:30 – 3:55 **Vera Fischer** (Vienna), *MAD families, splitting families and large continuum.*

Session C, MONDAY, APRIL 2

Room B223

- 2:00 – 2:25 **Jakob Kellner** (Vienna), *TBA*
2:30 – 2:55 **Clinton Conley** (Cornell), *Independence numbers of graphs and group actions.*
3:00 – 3:25 **Asgar Törnquist** (Copenhagen), *TBA*

Special Session on Model Theory

(Organized by Michael C. Laskowski)

Session A, MONDAY, APRIL 2

Room B231

- 2:00 – 2:25 **Martin Bays** (McMaster), *Abelian functions and categoricity*.
2:30 – 2:55 **Koushik Pal** (Maryland), *Model companion of unstable theories with an automorphism*.
3:00 – 3:25 **Alexei Kolesnikov** (Towson), *Homology groups in model theory*.

Session B, TUESDAY, APRIL 3

Room B231

- 9:00 – 9:25 **Lynn Scow** (UIC), *Ramsey classes of finite trees*.
9:30 – 9:55 **Pantelis Eleftheriou** (Waterloo), *On groups interpretable in arbitrary ω -minimal structures*.
10:00 – 10:25 **Moshe Kamensky** (Notre Dame), *Internal covers of categories*.

Special Session on Structural Proof Theory

(Organized by Dale Miller)

Session A, MONDAY, APRIL 2

Room B235

- 2:00 – 2:35 **Dale Miller** (INRIA), *An overview of structural proof theory and computing*.
2:40 – 3:15 **Alexis Saurin** (Paris VII), *Proof search and the logic of interaction*.
3:20 – 3:55 **David Baelde** (ITU Copenhagen), *A proof theoretical journey from programming to model checking and theorem proving*.

Session B, TUESDAY, APRIL 3

Room B235

- 9:00 – 9:35 **Stefan Hetzl** (Vienna University of Technology), *Which proofs can be computed by cut-elimination?*
9:40 – 10:15 **Marco Gaboardi** (Pennsylvania), *Light logics for polynomial time computations*.

CONTRIBUTED TALKS

Session A, SATURDAY, MARCH 31

Room B223

- 4:30 – 4:50 **Sean Cox***, *More on Martin's maximum and tower forcing.*
4:55 – 5:15 **Justin Palumbo**, *Dominating and unbounded reals in Hechler extensions.*
5:20 – 5:40 **Monroe Eskew**, *Generalization by collapse.*
5:45 – 6:05 **David Milovich**, *Forbidden local bases.*

Session B, SUNDAY, APRIL 1

Room B223

- 4:30 – 4:50 **Lu Liu (Jiayi Lu)**, *Combinatorial property vs. computational property.*
4:55 – 5:15 **David Belanger**, *Weak truth table degrees of structures.*
5:20 – 5:40 **François Dorais, Jeffrey Hirst* and Paul Shafer**, *Reverse mathematics and field extensions (Preliminary Report).*
5:45 – 6:05 **Dan Willard**, *An unusual reflection principle for self-justifying logics.*

Session C, MONDAY, APRIL 2

Room B223

- 4:30 – 4:50 **Vincent Guingona**, *On VC-minimal theories.*
4:55 – 5:15 **Greg Hjorth and Ioannis Soudatos***, *Independently axiomatizable $L_{\omega_1\omega}$ theories.*
5:20 – 5:40 **Wim Ruitenburg**, *Intuitionistic quantifier elimination and model completeness.*
5:45 – 6:05 **Sam Sanders**, *Reuniting the antipodes: bringing together nonstandard analysis and constructive analysis.*

Session D, TUESDAY, APRIL 3

Room B223

- 9:00 – 9:20 **Joseph W. Norman**, *Saving truth from orthodoxy: better logic through algebra, probability, and dynamical systems.*
9:25 – 9:45 **Dennis Cudia**, *The Boltzmann principle and degeneracy I.*
9:50 – 10:10 **Matthew Smedberg**, *A dense family of finite 1-generated distributive groupoids.*
10:15 – 10:35 **Kuanysh Abeshev**, *On the existence of universal numberings for families of d.c.e. sets.*
10:40 – 11:00 **Cyrus Nourani**, *Competitive models, compatibility, game tree degrees and projective geometry on random sets.*