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), 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 (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 Warren Goldfarb (Harvard University), Van Heijenoort as editor: Reminiscences.

Special Session on Computability

(Organized by Laurent Bienvenu and Jan Reimann)

Session A, SATURDAY, MARCH 31

- 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 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

- 2:00-2:25 Andrea Medini(Madison), The topology of ultrafilters as subspaces of 2^{ω}
- 2:30 2:55 **Clinton Conley** (Cornell), Independence numbers of graphs and group actions.

Special Session on Model Theory

(Organized by Michael C. Laskowski and Bradd Hart)

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

3:00 - 3:25 Alexei Kolesnikov (Towson), Homology groups in model theory.

Session B, TUESDAY, APRIL 3 Room B231

9:00 - 9:2	Lvnn	Scow	(UIC).	Ramseu	classes	of	finite trees	
------------	------	------	--------	--------	---------	----	--------------	--

automorphism.

- 9:30 9:55 Pantelis Eleftheriou (Waterloo), On groups interpretable in arbitrary o-minimal structures.
- 10:00 10:25 Vincent Guingona (Notre Dame), On VC-minimal theories.

Special Session on Structural Proof Theory

(Organized by Dale Miller)

Session A, MONDAY, APRIL 2

Room B235

2:00 - 2:35	Dale Miller (INRIA	Λ), 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 $3\,$

- 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

- 4:55 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, Combinatorial property vs. computational property.
- 4:55 5:15 **David Belanger**, Weak truth table degrees of structures.
- 5:20 5:40 François Dorais, Jeffry Hirst (speaker) 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

- 4:55 5:15 Greg Hjorth and Ioannis Souldatos (speaker), 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

- 9:00 9:20 **Joseph 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.